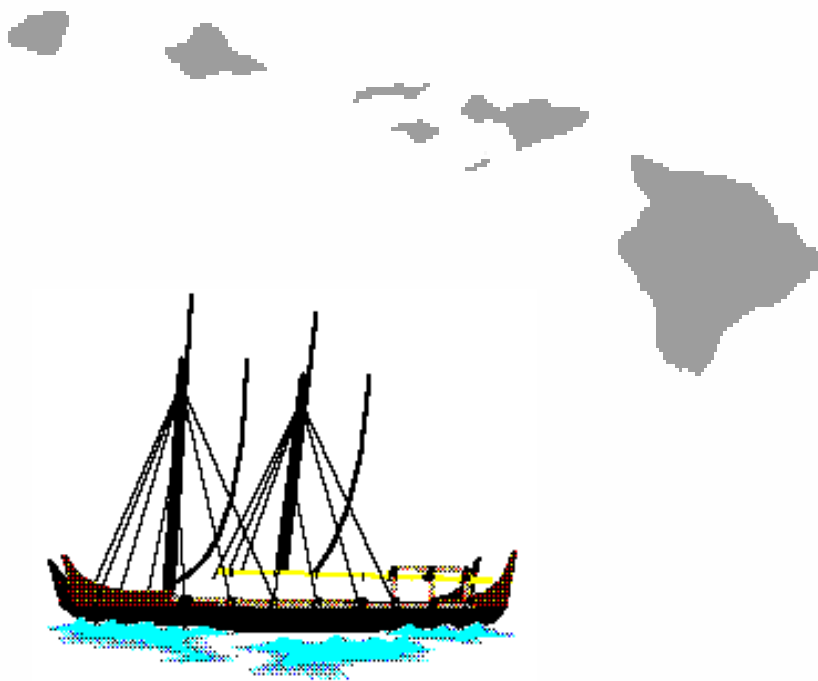


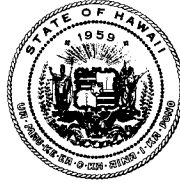
May 2005

Hawai'i



Integrated Epidemiologic Profile of HIV/AIDS in Hawai'i

**HIV/AIDS Surveillance Program
STD/AIDS Prevention Branch
Hawai'i State Department of Health
Honolulu, HI**



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In reply, please refer to:
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May 31, 2005

Dear Readers:

This 2005 edition of the *Integrated Epidemiologic Profile of HIV/AIDS in Hawaii* is an essential document for anyone involved with HIV/AIDS program planning and development, service delivery, grant writing or funding in the State of Hawaii. The document is written to be utilized, and every effort has been made to present the information in a user-friendly manner with careful selection of vital HIV/AIDS data sets.

I would like to particularly thank two staff members of the HIV/AIDS Surveillance Program, Pritty Borthakur and Yuanshan "Sandy" Qiu, for their many hours of work preparing the body of the Epi Profile, the data analysis, as well as providing the technical assistance in creating the tables and graphs. Their dedication is gratefully acknowledged.

Special thanks are extended to Dr. Deborah Grafton-Wasserman who undertook the major responsibility for the overall development of the Epi Profile. I would like to recognize her commitment and dedication to preparing this document. Appreciation is due also to many staff members of the Hawaii Department of Health's STD/AIDS Prevention Branch for their efforts and professional contributions to development of this Epi Profile. They include Suzanne Richmond-Crum, Roy Ohye, Venie Lee, Ray Higa, Nancy Kern, Paul Davis, Tim Juday, and Mary Santa Maria.

This document would not be complete without the support of our community partner organizations including: Life Foundation, Maui AIDS Foundation, Hawaii Island HIV/AIDS Foundation, Malama Pono of Kauai, Gregory House Programs, Save the Food Basket, AIDS Community Care Team, AIDS Education Project, Chow Project, Waikiki Health Center, Hawaii Pregnancy Risk Assessment Monitoring System (PRAMS), DOH Health Status Monitoring, and Hawaii Youth Risk Behavior Program. I wish to extend my aloha to each of these programs and others for their time and effort in furnishing statewide HIV/AIDS data to help better understand this epidemic in Hawaii.

The most important way we can all express our thanks to the individuals and organizations mentioned above is by using the Profile, by having open informed discussions, and by developing effective HIV prevention and care programs that will benefit the people of Hawaii.

Mahalo and Aloha,

Peter Whiticar, Chief
STD/AIDS Prevention Branch

Executive Summary

This epidemiologic profile describes the HIV/AIDS epidemic in Hawai'i, using as the primary data source, the HIV/AIDS Surveillance Program, Department of Health (DOH). Hawai'i's HIV reporting is by a code-based system, but reliable data are not available at this time. This profile contains the first 19 years of AIDS diagnosed in Hawai'i through 2001 and reported through September 2003, with major emphasis on the years after 1996. It describes which groups in Hawai'i's population are most impacted by AIDS. By looking at changes over time, it also identifies trends of increasing risk in certain groups. This profile also contains statewide data on HIV/AIDS care reflecting those who are receiving care in Hawai'i.

The key findings are summarized as below:

- AIDS mortality and incidence have declined in Hawai'i and at the national level since the widespread use of the highly active anti-retroviral therapy (HAART) in 1996. Hawai'i's AIDS case rate for 2001 was 10.1 (per 100,000 population) and ranked 22nd among the states.
- A total of 2,681 AIDS cases were diagnosed by December 31, 2001 and reported by September 15, 2003; 1,533 were known to be deceased.
- The number of people living with HIV/AIDS in Hawai'i is estimated to be between 2,600 and 2,900. This estimate includes those who are unaware of their HIV+ status.
- In 2002, the DOH HIV testing and counseling program provided 8,550 HIV test anonymously, less than one percent (51) was positive.
- Although the overwhelming majority of Hawai'i's AIDS cases (2,496/2,681) have been men, the proportion of cases diagnosed in women (186) has been increasing over time. There are no transgender data in HIV/AIDS Surveillance, but testing and counseling data show that 1.4 percent (122/8,550) of those tested anonymously was transgender and four were positive in 2002.
- Men who have sex with men (MSM) account for the majority of AIDS cases (2,011/2,681), followed by injection drug use (IDU) (192), and the MSM/IDU combination (181). The proportion of AIDS cases related to MSM and MSM/IDU have decreased over time, stabilized for IDU cases, and increased for heterosexual contact over time (140).
- Caucasians have more AIDS cases (1,700/2,681) than any other group, followed by the combined group of Asian and Pacific Islanders (API) with 712 cases. The API group is broken into 23 ethnic group including Hawaiians/Part-Hawaiians. Over time the proportion of API cases has been increasing, while the Caucasian proportion has been decreasing.

- For Caucasians and African Americans, the proportion of AIDS cases exceeds their proportion of the state population. At the same time, they have higher incidence rates as compared to the average state rate (cases per 100,000). For Hawaiians/Part Hawaiians, the proportion of cases is slightly higher than their proportion of the state population. They have a higher incidence rate than the average state incidence rate. For all other racial/ethnic groups, their proportion of AIDS cases is less than their proportion of the state population. They have lower incidence rates than the average state incidence rate.
- Most AIDS cases have been diagnosed in individuals in their thirties and forties. Over time there has been a decrease in the proportion of cases diagnosed in their twenties and an increase in the proportion at ages over thirties. There was a one percent (16/2,681) cumulative pediatric AIDS diagnosis and only <4 cases in recent years (1996 – 2001).
- The majority of the AIDS cases (1,913/2,681) have been diagnosed in Honolulu County, followed by Hawai'i County (366), Maui County (285), and Kauai County (117). During 2000 – 2001, Maui County has the highest AIDS rate (30 cases per 100,000 population), followed by Hawai'i (19), Honolulu (17), and Kauai County (14).

HIV/AIDS Care Services data summary:

- As of September 30, 2003, the number of people living with AIDS (PLWA) was 1,246. This number represents only individuals diagnosed in Hawai'i. It does not contain data on those diagnosed out-of-state but receive care services in Hawai'i. It also does not include those who were diagnosed in Hawai'i but then moved to another state. The distribution of PLWA is primarily males (91%), Caucasians (64%), and live in Honolulu County (65%).
- Federally funded Ryan White Title II and Title III programs and the state-funded Hawai'i Seropositivity and Medical Management Program (HSPAMM) are the major sources of publicly funded care services for HIV/AIDS clients in Hawai'i. In 2001, Title II funding was used primarily for medical care (518), dental care (328), mental health counseling (76), food bank/home delivered meals (538), and housing assistance (248). The case management services for over 1,500 clients were supported by state funds only.
- In 2003, HSPAMM provided 900 clients with two physician office visits and laboratory tests. Hawai'i's Drug Assistance Program (HDAP) and HIV Insurance Contribution Program (H-COBRA) provide HIV/AIDS medications and medical support.
- Hawai'i's AIDS Service Organizations (ASO) provide case management services for their HIV/AIDS clients. In 2002, a reported 1,001 clients received services from these organizations statewide. This total may not represent unique individuals because clients receiving services at two or more ASOs may have been reported more than once. This can happen when a neighbor island client may also receive services on Oahu or visa versa. However, for services provided within any one county there is no duplication.

- During 2002, a total of 265 clients received services from the Maui Community Clinic and the Waikiki Health Center (primarily under Title III). About 50% received highly active anti-retroviral therapies. Almost half of the clients live below the federal poverty level and about 30% were without medical insurance.
- The clients of the above care programs were primarily males, Caucasians, and aged 20 - 24. A slightly higher percentage of female clients received services as compared to the percentage of females living with AIDS. There are no obvious disparities shown in access to care assistance, as the percentage of different population groups accessing multiple care services is similar to that of the groups of people living with AIDS (PLWA) statewide.

Table of Contents

A Letter to Readers	i
Executive Summary	ii
List of Figures and Tables	vii
Introduction	1
Background	1
Data Sources.....	1
Profile Strengths and Limitations.....	4
Profile Preparation	5
Chapter I. What are the Sociodemographic Characteristics of the General Population in the State of Hawai`i?	7
Summary	7
Demographics	7
Socioeconomic Status.....	9
Chapter II. What is the Scope of the HIV/AIDS Epidemic in the State of Hawai`i?...	13
Summary	13
Characteristics of Individuals Diagnosed with AIDS	13
AIDS Mortality	19
Persons Living with AIDS	21
Comparison Newly Diagnoses of AIDS with Persons Living with AIDS.....	23
The Geographic Distribution of HIV/AIDS infection	25
Honolulu County	26
Hawai`i County	27
Maui County	28
Kauai County	29
Chapter III. How does HIV/AIDS Infection Affect Various Populations in the State of Hawai`i?	31
Summary	31
Men Who Have Sex with Men (MSM)	32
Injection Drug Users (IDU)	34
Men Who Have Sex with Men and Inject Drugs	39

Persons at Risk for HIV/AIDS Through Heterosexual Contact	40
HIV/AIDS in Women and Children	46
Transgender (TG) at Risk	49
HIV/AIDS in Adolescents /Young Adults	49
HIV/ AIDS in Caucasians	51
HIV/AIDS in Asian and Pacific Islander Ethnic Groups	52
HIV/AIDS in Hawaiians and Part-Hawaiians	55
HIV/AIDS in Filipinos	56
HIV/AIDS in Hispanics	57
HIV/AIDS in African-Americans	58
HIV Testing in the General Population and in Special Populations	59
Counseling and Testing, Pregnant Women, Military Applicants, Custody Population, BRFSS	
Data on Related Diseases and Program --Hepatitis C.....	65
Chapter IV. What are the Patterns of Utilization of HIV/AIDS Care Services for	
Persons in the State of Hawai`i?	66
Summary	66
State Ryan White Title II Data	67
Hawaii’s AIDS Drug Assistance Program	68
Hawaii Insurance Continuation Program	69
AIDS Service Organizations	70
Housing Support and Save the Food Basket	72
Waikiki Health Center	72
HSPAMM	74
Appendixes	80
Highlights and analysis of each Chapter.....	80
Health Education/Risk Reduction (HERR)	88
Abbreviations.....	89
Definitions - Epidemiology 101.....	91
Proportional Allocation method	93
Definitions of Risk Group - HIV/AIDS Surveillance Projects	95

List of Figures

Chapter II. What is the Scope of the HIV/AIDS Epidemic in the State of Hawai`i? ..	13
2.1 Numbers of Diagnoses and Rates of AIDS by Year (1983-2001)	14
2.2 Percentage of AIDS Cases by Sex (1983-2001)	15
2.3 AIDS Cases by Race/Ethnicity (1996-2001)	16
2.4 Male and Female AIDS Cases by Race/Ethnicity (1996-2001)	17
2.5 Hawai`i AIDS Cases by Age and Gender (2000-2001)	17
2.6 Percentage of Hawai`i AIDS Cases by Risk (1983-2001)	18
2.7 AIDS-Related Death, as of September 15, 2003	20
2.8 Persons Living with AIDS at end of each Year	21
2.9 Persons Living with AIDS by Race/Ethnicity, as of September 15, 2003	22
2.10 Distribution of Persons Living with AIDS by Risk, as of September 15, 2003	22
2.11 Distribution of Persons Living with AIDS by Current Age, as of September 15, 2003	22
2.12 Rate of Persons living with AIDS by County of Residence at Diagnosis, as of September 15, 2003.....	22
2.13 AIDS Cases by County of Residence at Diagnosis (1983-2001)	25
2.14 Honolulu County AIDS Cases by Gender(1983-2001)	26
2.15 Persons Living With AIDS in Honolulu County as of September 15, 2003	26
2.16 Hawai`i County AIDS cases by Gender (1983-2001).....	27
2.17 Persons Living With AIDS in Hawai`i County as of September 15, 2003	27
2.18 Maui County AIDS Cases by Gender (1983-2001).....	29
2.19 Persons Living With AIDS in Maui County as of September 15, 2003	29
2.20 Kauai County AIDS Cases by Gender (1983-2001).....	30
2.21 Persons Living With AIDS in Kauai County as of September 15, 2003	30
Chapter III. How does HIV/AIDS Infection Affect Various Populations in the State of Hawai`i?	31
3.1 AIDS Cases by Risk Factor (1983-2001)	32
3.2 MSM AIDS Cases by Race/Ethnicity (1996-2001).....	32
3.3 MSM AIDS Cases by Age (1996-2001).....	33
3.4 MSM AIDS Cases by County (1996-2001)	33
3.5 Primary and Secondary Syphilis Male-to-Female Ratios (1996-2001).....	33
3.6 IDU AIDS Cases by Gender (1983-2001).....	34
3.7 IDU Cases by Race/Ethnicity (1983-2001).....	35
3.8 Substance Use by Age (2000-2001)	35
3.9 Drug Use among Hawai`i High School Students (2001).....	36
3.10 Race Ethnicity of IDU-Related AIDS Cases (1983-2001).....	39
3.11 Asian Pacific Islanders IDU-Related AIDS Cases (1983-2001)	39
3.12 IDU-Related Cases by Age (1996-2001).....	39
3.13 MSM/IDU AIDS Cases by Age (1983-2001).....	40
3.14 Percentage of Heterosexual and Non-Heterosexual Contact AIDS Cases (1983-2001).....	40
3.15 Heterosexual and Non- Heterosexual Contact AIDS Cases and Gender (1996-2001).	41

3.16 Percentages of High School Students who Responded for Sexual Behavior Questions (2001).....	42
3.17 Syphilis Cases by Gender (1992-2002)	43
3.18 Gonorrhea Cases by Gender (1992-2002)	43
3.19 Gonorrhea Cases by Race/Ethnicity (1996-2001)	44
3.20 Gonorrhea Cases by Age and Gender (1996-2001)	44
3.21 Chlamydia Cases by Gender (1992-2002).....	44
3.22 Chlamydia Cases by Race/Ethnicity (1996-2001).....	45
3.23 Chlamydia Cases by Age and Gender (1996-2001).....	45
3.24 Female AIDS Cases by Race/Ethnicity (1983-2001).....	46
3.25 Male AIDS Cases by Race/Ethnicity (1983-2001)	46
3.26 Female AIDS Cases by Risk Behaviors (1983-2001).....	47
3.27 AIDS Cases by Gender and Age 1996-2001	47
3.28 Adolescent/Young Adult AIDS Cases by Race/Ethnicity (1983-2001).....	50
3.29 Adolescent/Young Adult AIDS Cases by Risk (1983-2001).....	50
3.30 Percentage of Chlamydia Cases by Age (1996-2001)	51
3.31 Percentage of Gonorrhea Cases by Age (1996-2001).....	51
3.32 Caucasian AIDS Cases and Population	51
3.33 AIDS Cases by Race/Ethnicity, Diagnosed in Hawai`i (1983-2001).....	53
3.34 Asian and Pacific Islander AIDS Cases and Population	53
3.35 Hawaiian AIDS Cases and Population	55
3.36 Filipino AIDS Cases and Population	56
3.37 Hispanic AIDS Cases and Population	57
3.38 African American AIDS Cases and Population	58
3.39 Trends in Counseling and Testing Program by Gender (1993-2002)	59
3.40 Trends in Counseling and Testing Program by Number of Positive HIV Tests and Gender (1993 – 2002)	60
3.41 HIV Tests, Hawai`i Counseling and Testing Data (1998-2002).....	60
3.42 HIV Positive Tests, Hawai`i Counseling and Testing Data (1998-2002).....	61
 Chapter IV. What are the Patterns of Utilization of HIV/AIDS Care Services for Persons in the State of Hawai`i?	
4.1 Comparison of Numbers of ASO’s Clients (Year 2002) and Persons Living with AIDS by County as of December 31, 2001.....	71
4.2 Number of Newly Enrolled HSPAMM Clients by Year and Length of Resided in Hawai`i (1993-2002).....	76
4.3 Income Among Active Male and Female HSPAMM Clients, December 2003.....	76
4.4 Medical Insurance Status Among Active Male and Female HSPAMM Clients, December 2003	77
4.5 Prescription Drug Insurance Status Among Active Male and Female HSPAMM Clients, December 2003	77
4.6 HSPAMM Clients by CD4 Count by Year of Enrollment, 1989-2002.....	79
4.7 Distribution of HSPAMM Clients by CD4 Count and Gender, All Enrolled and Living, December 2002.....	79

List of Tables

Chapter I. What are the Sociodemographic Characteristics of the General Population in the State of Hawai`i?	7
1.1 Percent Distribution of the Hawai`i Population by County 1990, 2000 US Census.....	7
1.2 Percent Distribution of the Hawai`i Population by Race/Ethnicity, 1990, 2000 US Census, and 2000 Population Redistributed.....	8
1.3 Percent Distribution of the Hawai`i Population by Race and Gender (2000).....	9
1.4 Percent Distribution of the Hawai`i Population by Age Group and Gender, 2000	9
1.5 Percent Distribution of Persons Living Below the Poverty Level during the Previous 12 Months, by County and Age Group (2000).....	10
1.6 Percent Distribution of the Hawai`i Population 25 and Older by Educational Attainment for All Counties (2000).....	10
1.7 Percentage Distribution of Hawai`i Adults (19-64) and Children (0-18) by Health Insurance Coverage (2000-2001).....	11
Chapter II. What is the Scope of the HIV/AIDS Epidemic in the State of Hawai`i?	13
2.1 Hawai`i AIDS cases by Gender (1983-2001).....	15
2.2 Hawai`i AIDS Diagnoses by Race/Ethnicity (2000-2001 and 1983-2001).....	16
2.3 Hawai`i AIDS cases, by Age at Diagnosis (1983-2001).....	17
2.4 Hawai`i AIDS cases by Risk Factors (1983-2001).....	18
2.5 Hawai`i AIDS Cases, by Risk Factors and Gender (1996-2001).....	19
2.6 Ranking of 10 Leading Underlying Causes of Death among Persons 25–44 Years of Age (1999-2001).....	19
2.7 Comparison of Persons Dying of AIDS, and Comparison of Persons Dying of and Living with AIDS.....	20
2.8 Persons Living with AIDS by Select Characteristic, as of September 15, 2003	22
2.9 A Comparison of new AIDS cases in 2000-2001 and People Living with AIDS as of December 31, 2001.....	24
2.10 Hawai`i AIDS cases (1983-2001) and Persons Living with AIDS by County.....	25
2.11 AIDS Cases by District, Honolulu County (1996-2001).....	27
2.12 Hawai`i County AIDS Cases (1996-2001).....	28
2.13 Maui County AIDS Cases (1996-2001).....	29
2.14 Kauai County AIDS Cases (1996-2001).....	30
Chapter III. How does HIV/AIDS Infection Affect Various Populations in the State of Hawai`i?	31
3.1 MSM AIDS Cases by Race/Ethnicity (1983-2001).....	32
3.2 Characteristics of MSM Syphilis Cases (2001-2003).....	33
3.3 Total IDU AIDS Cases by Age (1983-2001).....	35
3.4 Substance Abuse Treatment Admissions by Primary Substance of Abuse by Gender and Age Group (2002).....	37
3.5 Syringe Exchange (SEP) Data	38
3.6 Characteristics of Participants in the Hawai`i Syringe Exchange Program (SEP) (2001 and 2002)	38

3.7	HIV Self-Reported Testing Among SEP Clients	38
3.8	MSM/IDU AIDS Cases by Race/Ethnicity (1983-2001).....	39
3.9	Heterosexual AIDS Cases by Race/Ethnicity (1983-2001).....	41
3.10	Heterosexually Acquired AIDS Cases (1983-2001).....	41
3.11	Male and Female AIDS Cases by Race/Ethnicity (1983-2001).....	47
3.12	Substance Use, Pregnant Women by Race/Ethnicity (2000-2001)	48
3.13	Caucasian AIDS Cases (1983-2001).....	52
3.14	Asian Pacific Islander AIDS Cases (1983-2001).....	54
3.15	Hawaiian AIDS Cases (1983-2001).....	55
3.16	Filipino AIDS Cases (1983-2001).....	56
3.17	Hispanic AIDS Cases (1983-2001).....	57
3.18	African American Cases (1983-2001).....	58
3.19	Test Sites, Hawai`i C&T Program (2001-2002).....	60
3.20	HIV Tests Performed and Positives Detected by County, Counseling and Testing Program (1998-2002).....	60
3.21	Return Rates for HIV test results, Hawai`i C& T Data (2001-2003).....	61
3.22	HIV Seroprevalence in Childbearing Women (1997-2002)	62
3.23	Civilian Applicants to the Military – HIV Testing Results (1996-2002).....	62
3.24	HIV/AIDS in Custody Population (1999-2001).....	62
3.25	Perceived Importance of Knowing HIV Status in the General Population (2001)	64
3.26	HIV Testing in the General Population (2001).....	64
3.27	Reasons for HIV Testing and Where HIV Test Received (2001).....	64
3.28	Beliefs of the General Population in the Value of Medication for HIV+ Individuals (2001).....	65

Chapter IV. What are the Patterns of Utilization of HIV/AIDS Care Services for Persons in the State of Hawai`i?			66
4.1	Utilization of Ryan White Title II Service, Average Visits per Client (2001).....	67	
4.2	Comparison of CARE ACT Title II Clients and Persons Living with AIDS (2001).....	68	
4.3	Characteristics of Clients Enrolled in the Hawai`i AIDS Drug Assistance Program (June 2002)	69	
4.4	Unduplicated H-COBRA Clients and Months of Coverage (2001).....	69	
4.5	Types of Service Provided, ASO (2001).....	70	
4.6	Demographic Characteristics of Clients in AIDS Service Organizations (2002).....	71	
4.7	Utilization of Ryan White Title II & III Service at Waikiki Health and Community Clinic of Maui.....	72	
4.8	Selected Characteristics of Ryan White CARE ACT Title II and III Clients (2002).....	73	
4.9	Comparison of Active HSPAMM Participants (12/01/02) with Persons Living with AIDS (12/31/01).....	75	
4.10	Newly-Enrolled HSPAMM Clients (2001-2002).....	75	
4.11	Clients by Number of Months from First HIV+ Test to HSPAMM Enrollment, 2001- 2002 Combined.....	75	
4.12	HSPAMM Clients by Place of Birth (December 2002)	76	
4.13	Annual Lab Services per HSPAMM Client Received by County (2002).....	78	
4.14	HSPAMM New Enrollees and Co-infected with HIV and Hepatitis C (2001-2002)....	78	

Introduction

This document illustrates the HIV/AIDS epidemic in the State of Hawai'i. Sources of data from HIV/AIDS Surveillance Program were reviewed to create an epidemiologic profile of AIDS that will be a comprehensive resource for planning HIV/AIDS prevention activities as well as care services. Four key questions are addressed:

1. What are the socio-demographic characteristics of the general population in the State of Hawai'i?
2. What is the scope of the HIV/AIDS epidemic in the State of Hawai'i?
3. How does HIV/AIDS Infection Affect Various Populations in the State of Hawai'i?
4. What are the patterns of utilization of HIV services by persons in Hawai'i?

The goal of this epidemiologic profile is to provide scientifically-based epidemiologic information to understand and evaluate HIV/AIDS transmission patterns in Hawai'i and to serve as a resource for prevention and care services, policy development, and funding requirements.

Background

Previous profiles have described the AIDS epidemic in the State of Hawai'i using AIDS surveillance data as the primary source of information. The focus was on prevention planning. This profile incorporates new guidelines to meet the needs of both prevention and care planning. Many of the same programs have provided information as in the past with a new emphasis, not just on the number of AIDS cases, but on the actual utilization of services. New sources of data have been added.

Data Sources

Many programs contributed specifically requested data. Some data sources were available by internet access. All sources have contributed the multiple perspectives required to provide as complete a profile as possible. The following are the data sources consulted.

1. Core AIDS Surveillance Data

HIV/AIDS Surveillance Program, STD/AIDS Prevention Branch, Hawai'i Department of Health, has monitored the AIDS epidemic since 1983. AIDS data from this program are used in this profile, and include only those classified as a Hawai'i diagnosis through December 31, 2001 and reported as of September 15, 2003. Cases designated as "Out-of State" are excluded. Persons who either do not know they have AIDS or have not sought testing or treatment, are not included. The HIV unnamed reporting system became effective on August 27, 2001; however, the HIV data cannot be released due to reporting delay. Unless otherwise noted, all AIDS data presented in this profile come from the HIV/AIDS Surveillance Program, Data found in Chapters 2 and 3.

2. Hawai'i Seropositivity and Medical Management Program (HSPAMM)

Available to all HIV-positive individuals, this State-funded program provides specified primary care services. Those using these services may not be representative of all current HIV-infected individuals or all recently-infected individuals. Data found in Chapter 4.

3. Ryan White CARE Act Data and Related Programs

Data collected from the following programs are funded by Ryan White Title II and/or III with possible State and private funding supplementation. Those data include basic demographics and exposure information, types of tests and services received whenever available. Data are from clients who know their HIV serostatus and currently seek care and treatment services from providers funded through Ryan White Title II and III, provided they meet financial and insurance eligibility requirements. Data found in Chapter 4.

- **Hawai'i Insurance Continuation Program (H-COBRA)** –covers gaps in medical insurance for HIV positive individuals and dependent family members whose income is under 300% of the Federal poverty level.
- **Hawai'i Drug Assistance Program (HDAP)** –provides medications to HIV-positive individuals whose income is under 400% of the Federal poverty level.
- **AIDS Service Organizations** –receive contracts and support funds to provide services for the individuals with AIDS including medical, dental, mental health services, transportation assistance, financial assistance, etc. in each county.
- **Waikiki Health Center (Honolulu County) and Community Clinic of Maui (Maui County)** –provide medical support services under both Title II and III.
- **Gregory House Program and Save the Food Basket** –provide Housing assistance and food bank or home delivered meals, respectively, as well as client advocacy/support services.

4. STD Surveillance Data

STD Prevention Program, STD/AIDS Prevention Branch, Hawai'i Department of Health conducts statewide surveillance to monitor sexually transmitted diseases (STD). Disease information for this profile included the following reportable diseases:Chlamydia, Gonorrhea, and Syphilis. Data found in Chapters 3 and 4.

5. Counseling and Testing Program

Data are from the Counseling and Testing Program, STD/AIDS Prevention Branch, Hawai'i Department of Health. This program provides both confidential and anonymous testing. These data provide information on high-risk populations who agree to be tested. It is unknown how many tests represent repeat testing. It is not representative of all who are HIV positive, only those who received testing at DOH publicly funded sites. Data found in Chapter 3.

6. Vital Statistics Data

The National Center of Health Statistics collects birth and death data from each state's office of vital statistics. When available, data came from their website, www.nchs.gov. Data not available from the website were requested from the Hawai'i Department of Health Vital Statistics Branch. Data found in Chapters 2 and 3.

7. Population Data

Census 2000 and 1990 data and population estimates from the US Bureau of the Census are used. Other US Census and Summary File data and projections came from Hawai'i State Department of Business, Economic Development and Tourism. (www.hawaii.gov/dbedt/stats www.hawaii.gov/dbedt/stats.htm.visitorstats). Data are found in Chapter 1 and used for all calculated disease rates. Redistributed 2000 population calculations for race/ethnicity use recommended CDC methodology (Appendix III).

8. Behavioral Surveys

- **Behavioral Risk Factor Surveillance System (BRFSS)** --“State based random-digit-dialing telephone survey of adults that questions respondents about personal health experiences and behaviors risks associated with premature morbidity and mortality.” The Hawai'i Department of Health BRFSS Office was consulted for test site definitions. (www.cdc.gov/nccdphp/brfss.2001) Data found in Chapter 3.
- **Youth Risk Behavior Survey (YRBS)** --Self-administered questionnaire given to a representative sample of student in grades 9-12. Six categories of behaviors are included. Sexual behaviors that contribute to unintended pregnancies and STDs are included. Additional background and information are available at: (www.cdc.gov/nccdphp/dash/yrbs.2001) Data found in Chapter 3.
- **Hawai'i Pregnancy Risk Assessment Monitoring System (PRAMS)**-- is an ongoing, population-based risk factor surveillance system designed to identify and monitor selected self-reported maternal experiences and behaviors that occur before and during pregnancy. Additional background and information are available at: (www.eastwestqigong.org/prams3.html) Data found in Chapter 3.

9. Other Related Data

- **Bureau of Prisons Data** --Data from Bureau of Justice Statistics Bulletin, October 2002-- annual updates. www.ojp.usdoj.gov/bjs Data found in Chapter 3.
- **Civilian Applicants for Military Service** --Data from US Army Medical Surveillance Activity, requested October 2003. Data are found in Chapter 3.
- **Hawai'i Syringe Exchange Program (SEP)**--Annual reports documenting the activities of the Hawai'i Syringe Exchange Program. Data found in Chapter 3.
- **AIDS Education Project** --Seroprevalence in Childbearing Women data are found in Chapter 3.
- **State Health Facts** --Health indicator data, compiled by the Kaiser Family Foundation, which compares and ranks Hawai'i with the other states using numerous health indicators. www.statehealthfacts.kkf.org Data are found in Chapter 1. Also included was the United Health Foundation's State Health Rankings for 2002. www.unitedhealthfoundation.org .
- **National Household Survey of Drug Abuse**-- is an ongoing survey on the use of illicit drugs by the U.S. population aged 12 or older. The Hawai'i data are based on statistical estimates. Additional background and information are available at: <http://www.oas.samhsa.gov/> . Data are found in Chapter 3.
- **Treatment Episode Data Set (TEDS)** – Comprises data routinely collected by states for the monitoring of their individual substance abuse treatment programs. In general, facilities reporting TEDS data are those that receive State alcohol and/or drug agency funds (including

Federal Block Grant funds) for the provision of alcohol and/or drug treatment services. Additional background and information are available at: <http://www.oas.samhsa.gov/dasis.htm>. Data are found in Chapter 3.

- **Hawai'i Hepatitis C Program**—Provide data for Hepatitis C in Hawai'i. Data are found in Chapter 3.
- **2002 Hawai'i Student Alcohol, Tobacco, and Other Drug Use Study**—Hawai'i Alcohol and Drug Abuse Division, and Dr. Renee Storm Pearson from the University of Hawai'i Speech Department collaborated in a study designed to assess prevalence and trends in substance use, treatment needs, and risk and protective factors that predict substance use and abuse among Hawai'i public and private school students statewide. Additional information is available at: <http://www.state.hi.us/doh/resource/adad/report2002/2002executivesummary.pdf>. Data are found in Chapter 3.

Profile Strengths and Limitations

This epidemiologic profile describes the effect of the Hawai'i HIV/AIDS epidemic in terms of sociodemographic, geographic, behavioral, and clinical characteristics. The profile is a tool that can be used by those who make recommendations for planning programs, evaluating programs and policies; and allocating HIV prevention and care resources. This epidemiologic profile includes data in many different forms: descriptive text, tables of numbers and graphical figures have been created to provide help to reader to get a better understanding of the HIV epidemic in Hawaii and characterize the affected population. The data of this profile reflect where a person lived when the diagnosis of HIV or AIDS was made, which may or may not be where the person currently lives. Hawai'i HIV data are not available at this time. Thus, AIDS data in this document do not completely represent the characteristics of persons who have recently been infected with HIV, nor provide a true measure of HIV incidence. Despite these limitations, Hawai'i AIDS data remain the best available resource to measure the impact and need for resources for HIV/AIDS-affected individuals. AIDS surveillance data have been and continue to be used for formula-based distributions of Federal funds for prevention and care.

This document provides information about persons who are living with HIV/AIDS and utilizing the HIV/AIDS care and support services in Hawai'i. Keep in mind that the number of clients receiving services at the individual program level for Ryan White CARE Act Title II, Title III as well as state program data, is unduplicated. However, data aggregated at the state level may have duplications. Many clients receive HIV/AIDS care services and support in different ways and different locations, particularly Oahu.

Here are some hints to keep in mind when studying these:

1. The telephone number of HIV/AIDS Surveillance Program is (808) 733-9010.
2. Know the limitation of the data and their sources.
3. Do not over-interpret small changes of differences. Remember what the number represent (e.g., number of cases versus rates, percentage or ratios).
4. The numbers of AIDS and HIV cases

Profile Preparation

This profile was prepared by the Hawai'i Department of Health HIV/AIDS Surveillance Program in close collaboration with Hawai'i Ryan White CARE Act related programs and the Hawai'i Seropositivity and Medical Management Program (HSPAMM), as well as many other programs. All the sociodemographic data (except as otherwise noted), vital statistics, behavior surveys (surveillance) and substance use data were downloaded from Web sites or obtained by special request. A number of web sources compiled their data from other organizations and agencies. For a brief overview of each chapter see Appendix I on page 80.

Statistical methods - The following statistical methods were used to measure the effect of the epidemic upon specific populations:

- Generalized HIV prevalence estimates were calculated using a method recommended by the CDC. Note: This is an interim measure until the actual Hawai'i HIV surveillance data are available.
- Incidence rates were calculated for the 12-month period (January through December) per 100,000 population. For these rates, denominators were derived from the 2000 Census or U.S./Hawai'i estimated population. The numerator is the number of reported cases that were diagnosed during that 12-month period. Some rates may have been calculated for a 2-year (or 6-year) time period and were labeled as such.
- AIDS data represent the number of cases diagnosed in that year without adjusting for reporting delay. To minimize reporting delays, case information was not tabulated until September 15, 2003. (Reporting delay refers to the time between the diagnosis of a case and receipt of the report by the DOH.)
- The Bureau of the Census, in compliance with the Office of Management and Budget Directive 15 (OMB 15), expanded race/ethnicity reporting beginning with the 2000 Census. The expanded questionnaire allowed respondents to select one or more races to indicate their racial identity. While multiple race/ethnicity data were collected for the 2000 Census, all HIV/AIDS Surveillance data collected by individual states before 2003 allowed for only one race and Hispanic/non-Hispanic ethnicity to be chosen. The Hawai'i HIV/AIDS Surveillance Program began collecting multiple race data in 2003 and the new categories will be used in analyses of HIV/AIDS data. This document, however, follows the CDC guidelines to obtain race/ethnicity-specific population data similar to the categories used in HIV/AIDS surveillance data collection before 2003, and apply a standardized proportional allocation method to the population data¹ (See Table 1.2, page 8). Using this method, AIDS rates can be calculated using the same categories for race/ethnicity as the originally collected data. Further discussion can be found in the Appendix and Chapter 2. Readers should note also, Hawaiians/Pacific Islanders are categorized as one single race/ethnicity in the 2000 U.S. Census. Since this new reporting category was not implemented until 2003 in the Hawai'i HIV/AIDS Surveillance Program, Hawaiians/Pacific Islanders are still within Asian/Pacific islander group as subgroups throughout this document.

¹ Centers for Disease Control and Prevention and Health Resources and Services Administration. Integrated Guidelines for Developing Epidemiologic Profiles: HIV Prevention and Ryan White CARE Act Community Planning. Atlanta, Georgia: Centers for Disease Control and Prevention; 2004. Page 57.
<http://www.cdc.gov/hiv/pubs/guidelines.htm>

- Data are usually presented for the entire state since it would not be useful to analyze small numbers of cases in small geographic areas. Cases at the county level are examined only when case numbers are sufficient. Confidentiality continues to be of the highest priority. Data are presented only as “< 4” when cell sizes contained less than four. This will ensure confidentiality by minimizing individual patient-characteristic identifiers for a particular year. This will also increase the size of the data in individual cells to improve confidence in analyzing trends.

This epidemiologic profile includes data in many different forms. Readers should keep in mind: (1) Try to understand what the data represent. The telephone number at HIV/AIDS Surveillance is (808) 733-9010. (2) Know the limitations of the data and their sources. (3) Don't over-interpret small changes or differences particularly when the numbers themselves are small. (4) Always remember what the numbers represent – e.g. numbers of cases versus rates, percentages or ratios. (5) DO LOOK for inconsistencies with other sources of information. (6) Don't sum data from different tables - different methods may have been used to obtain various data sets. Some may overlap; others may not.

Contact the National Center for HIV, STD, and TB Prevention, for national AIDS data at the Centers for Disease Control and Prevention (CDC), Atlanta, GA 30333, and request the most recent HIV/AIDS Surveillance Report. Telephone contact is (800)-458-5231. Visit their website at www.cdc.gov

Chapter I

What are the Sociodemographic Characteristics of the General Population in the State of Hawai'i?

This section provides information on Hawai'i's demographic and socioeconomic characteristics as well as health indicators. Many of the disease rate calculations are based on this demographic information.

Summary

The State of Hawai'i has a population that is unique for its racial and ethnic diversity. More than one half is Asian/Pacific Islander; more than one fifth is of mixed race. The 2000 US Census collected mixed race data for the first time requiring a redistribution of the different racial/ethnic groups to conform to the categories used in HIV/AIDS surveillance programs. This redistribution also makes comparisons to the 1990 US Census clearer: a slight decrease among Caucasians and a slight increase among Asian/Pacific Islanders are seen. Specifically within the Asian/Pacific Islander category, there was a decrease among Hawaiians and increases among Filipinos and "Other API".

Almost three fourths of the state population lives in Honolulu County on the Island of Oahu. More than one fourth speaks a language other than English at home. More than four out of five residents have a high school education. One in ten lives below the poverty threshold – two in ten, if households headed by women are considered. Almost nine out of ten residents have some health insurance.

Demographics

General Geographic and Population Information: The State of Hawai'i has a total land mass of 6,423.4 square miles and is inhabited by a population of 1,211,537 (US Census 2000) spread over seven separate islands that are divided into 4 counties (Table 1.1). The four counties, in descending order of population, are Honolulu (Island of O'ahu), Hawai'i (Island of Hawai'i), Maui (Islands of Maui, Molokai, and Lanai), and Kaua'i (Islands of Kaua'i and Ni'ihau). Only the County of Honolulu is large enough to be designated a Metropolitan Statistical Area. Its 2000 population of 876,156 is 72.3% of the total state population. Population density for the state was 188.6 persons per square mile, which is more than twice the average national density of 79.6 persons per square mile.

Table 1.1 **Percent Distribution of the Population by County, Hawai'i 1990, 2000 US Census**

County	Residents Inhabit Islands	1990 Population	2000 Population	% Growth 1990-2000
Honolulu	O'ahu	836,231 (75.5%)	876,156 (72.3%)	4.8%
Hawai'i	Hawai'i	120,317 (10.9%)	148,677 (12.3%)	23.6%
Maui	Maui, Lanai, Molokai	100,504 (9.1%)	128,241 (10.6%)	27.5%
Kaua'i	Kaua'i, Ni'ihau	51,177 (4.6%)	58,463 (4.8%)	14.2%
Total		1,108,229	1,211,537	9.7%

Source: U.S. Census Bureau, Census 2000 Redistricting Data (P.L. 94-171) Summary file, Table PL1.

The State of Hawai'i's total population grew by 9.7% between the 1990 and 2000 Census. Honolulu County had a minor population change of 4.8%. Hawai'i County and Maui County experienced significant growth of 24% and 27% respectively, while Kaua'i County experienced a 14% increase in that 10-year period. The Census Bureau projected a 2.7% increase (1,227,024) in the state population for 2001 with similar county population distribution patterns as seen the 2000 US census.

Demographic Composition: Hawai'i is one of the most ethnically diverse states with no clear racial majority. As

determined from the 2000 US Census, twenty-one percent consider themselves of mixed racial background (Table 1.2); 24.3% Caucasian, 1.8% African American; 0.3% American Indian and Native Alaskan; 41.6% Asian; 9.4% Native Hawaiian and Pacific Islander. Among Asians, 16.7% were Japanese, 14.1% Filipino, 4.7% Chinese, 1.9% Korean, 0.6% Vietnamese and 6.1% other Asian. Among Hawaiian and Pacific Islanders, 6.6% was Native Hawaiian, 1.3% Samoan and other Pacific Islander. Asians, Hawaiians and Pacific Islanders combined, comprise 51.0% of the state population.

Table 1.2 Percent Distribution ^a of the Hawai'i Population by Race/Ethnicity, 1990, 2000 US Census, and 2000 population Redistributed--Using 1990 Data Acquisition Methodology ^b

Race	1990	2000	2000 Pop.
	Population N = 1,108,229	Population N = 1,211,537	Redistributed N = 1,211,537
Caucasian	33.4%	24.3%	31.4%
African American	2.5%	1.8%	2.3%
Am Ind./ Alaska Native	0.5%	0.3%	0.4%
Asian or Pac Is	61.8%	51.0%	65.9%
Japanese	22.3%	16.7%	21.5%
Filipino	15.2%	14.1%	18.2%
Hawaiian	12.5%	6.6%	8.6%
Chinese	6.2%	4.7%	6.0%
Korean	2.2%	1.9%	2.5%
Samoan	1.4%	1.3%	1.7%
Vietnamese	0.5%	0.6%	0.8%
Other API ^c	1.5%	4.9%	6.3%
Other Race	1.9%	1.3%	NA
Hispanic Origin	7.3%	7.2%	7.2%
Two or more races	NA	21.4%	NA

^a Ethnicity is independent of percentage total.

^b See Appendix

^c Other Asian Pacific Islander includes Other Asian, Other Pacific Islander, Guamanian, and Asian Indian

The "Mixed Race" classification was first used in the 2000 US Census. Comparisons with 1990 "Primary Race" categories are difficult because over 20% of Hawai'i's population consider themselves of mixed race. Table 1.2 redistributes the 2000 Census racial proportions estimating results using the 1990 Census categories (with no mixed race designation)². Further discussion can be found in the Appendix III, Proportional Allocation.

Adjusting the racial categories of the 2000 US Census population to match the 1990 Census categories, changes the above percentage to: 31.4% Caucasian; 2.3% African American; 0.4% American Indian and Native Alaskan; 53.8% Asian; 12.1% Native Hawaiian and Pacific Islanders,

² Centers for Disease Control and Prevention and Health Resources and Services Administration. Integrated Guidelines for Developing Epidemiologic Profiles: HIV Prevention and Ryan White CARE Act Community Planning. Atlanta, Georgia: Centers for Disease Control and Prevention; 2004. Page 57. <http://www.cdc.gov/hiv/pubs/guidelines.htm>

with 8.6% Hawaiian alone. When Asians, Hawaiians and Pacific Islanders are combined together using this method, they make up 65.9% of the state population. That is a slight increase of 3% since 1990 and equals the 3% decrease seen among Caucasians. There is also a 4% decrease in the Hawaiian population.

Table 1.3 shows how the general population is distributed by percent for race and gender. There are only slightly more males than females. The racial/ethnic

distribution of males was similar to that of females in Hawaiian/Pacific Islanders, American Indians, Hispanic and mixed race populations. Caucasians and African Americans have slightly higher percentage of males. Asians have a slightly higher percentage of females.

Table 1.3 Percent Distribution ^a of the General Population ^b by Race and Gender, Hawai'i, 2000

Race	Males	Females	Combined
	N=608,671	N=602,866	N=1,211,537
Caucasian	27.7%	24.0%	25.9%
African American	2.3%	1.5%	1.9%
Amer. Indian/AK Native	0.3%	0.3%	0.3%
Asian	39.9%	44.5%	42.2%
Hawaiian/Pacific Islander	9.6%	9.5%	9.6%
Mixed Race	20.1%	20.1%	20.1%
Hispanic Ethnicity	7.3%	7.2%	7.2%

^a Ethnicity is independent of percentage total.

^b Sources: US Census 2000 Data STCH-6R File

Age and Gender: The median age of Hawai'i residents in 2000 census data was 36.2 years.

Table 1.4 shows the percentage distribution of the population by age group and gender. The age distribution among males and females was similar (50.2% vs. 49.8%); however, there was a slightly higher proportion of males than females in the population under age 45. This trend was reversed in age

groups 45 and over ---the female proportion became larger. Almost 30% of the population was distributed between the ages of 25 and 44 (Table 1.4), 23% between the ages of 45 and 64, 24% were under the age of 18 (data not shown) and 13% were over the age of 65.

Table 1.4 Percent Distribution of the General Population, by Age Group and Gender, Hawai'i, 2000

Age Group	Males	Females	Combined
	N = 608,671	N = 602,866	N = 1,211,537
	%	%	%
<2	2.6%	2.5%	2.5%
2-12	15.4%	14.7%	15.1%
13-24	17.2%	15.3%	16.3%
25-44	30.4%	29.4%	29.9%
45-64	22.6%	23.2%	22.9%
65+	11.7%	14.8%	13.2%
Total	50.2%	49.8%	100.0%

^a Ethnicity is independent of percentage total.

^b Sources: US Census 2000 Data STCH-6R File , www. Census.gov

Socioeconomic Status

Poverty, Income and Education: The median household income in 2000 was \$49,820. Approximately 10% of the State of Hawai'i lives below the federal poverty

Almost twenty-one percent (20.6 %) of families headed by females with children under the age of 18 and 37.4% of families headed by females with children under the age of five lived below the poverty level. Sixty-four percent of the adult population was employed threshold³. The percentage of each county's population living below the poverty threshold ranged from 9.6% for Honolulu County to 15.3% for Hawai'i County. Maui and Kaua'i were both 10.4% (Table 1.5). More than 28% of those living in poverty were under the age of 15. Hawai'i County had the highest percentage in this age group, approximately 32%. The next most prevalent age group was 25-44 with almost 28% living below the poverty threshold. The percentages ranged from 24.9% for Kaua'i County to 30.5% for Maui County.

Table 1.5 Percent Distribution of Persons Living Below the Poverty Level during the Previous 12 Months, by County and Age Group, Hawai'i, 2000

	Honolulu County N=83,937	Hawai'i County N=22,821	Maui County N=13,311	Kaua'i County N=6,085	State Totals N=126,154
Age Groups	%	%	%	%	%
<15	27.6%	31.9%	26.8%	30.1%	28.4%
16-24	18.9%	16.8%	16.6%	15.5%	18.1%
25-44	27.6%	26.5%	30.5%	24.9%	27.5%
45-64	15.7%	18.7%	17.7%	20.5%	16.6%
65+	10.3%	6.1%	8.5%	9%	9.3%

Source: US Census Bureau, Census 2000 Summary File 3, compilation and calculations by the Hawai'i State Department of Business, Economic Development & Tourism, Hawai'i State Data Center

Among residents 25 years and older, 84.6% have reported achieving a high school diploma or higher with minimal difference among the individual counties (Table 1.6), 26.2% report a bachelor's degree or higher. Hawai'i County has proportionately more residents who received a high school diploma as their highest educational attainment (31.4%). Fewer than 9% in any

Table 1.6 Percent distribution of the population 25 and older, by educational attainment for all counties, Hawai'i 2000

	Honolulu N=579,998	Hawai'i N=97,708	Maui N=85,899	Kaua'i N=38,872	Total N=802,477
Educational Attainment	%	%	%	%	%
<9th Grade	7.3%	5.9%	7.5%	8.8%	7.2%
9-12 grade, No diploma	7.9%	9.5%	9.1%	7.9%	8.2%
High School Graduate	27.8%	31.4%	29.4%	29.7%	28.5%
Some college	21.3%	22%	23.7%	25%	21.8%
Associate Degree	7.9%	9%	7.8%	9.2%	8.1%
Bachelor's Degree	18.9%	14.6%	15.7%	13.3%	17.8%
Graduate / Professional Degree	9%	7.5%	6.7%	6.1%	8.4%

Sources: Census 2000, Hawai'i Summary File 3 and the Hawai'i State Department of Business, Economic Development & Tourism, Hawai'i State Data Center

³ The "federal poverty threshold" is defined at the national level and all states use the same dollar figures calculated by household size. States with a high cost of living will then underestimate the true prevalence of poverty. A truer poverty threshold for Hawai'i would be about 15% higher than the federal threshold.

county achieved less than a ninth grade education and the statewide average was 7.2%. Almost 27% of persons statewide over the age of five speak a language other than English at home.

Health Insurance: According to the Kaiser Family Foundation in its 2000-2001 population survey, only 12% of Hawai'i's population is without health insurance. (The national average is 19%.) Hawai'i is the only state that has an ERISA waiver which allows it to require private companies to pay into a state risk pool and provide reasonably affordable insurance to anyone who wants it. Hawai'i is one of 19 states with state-mandated comprehensive health insurance coverage for prescription contraceptives. Insurance-specific data from the Kaiser Family Foundation are illustrated in Table 1.7. Approximately three quarters of both adult (aged 19-24) males (76%) and females (75%) reported that they had health insurance coverage through an employer while only 69% of children under 19 years of age had coverage through an employer plan. All three groups were similarly covered by individual plans (5-6%). A significantly higher proportion of children were covered by Medicaid (17%). Nine percent of women and five percent of men were covered by Medicaid. Men represented the highest proportion without health insurance coverage (13%). Fewer women (10%) and children (9%) were without coverage. It should be noted that for children under the age of 19, Medicaid eligibility within the State of Hawai'i is 200% or less of the Federal poverty threshold.

Table 1.7 **Percentage distribution of adults (19-64) and children (0-18) by health insurance coverage, Hawai'i, 2000-2001**

Source of Insurance	Hawai'i Population, %Male 19-64 (N =379,274)	Hawai'i Population, %Female19-64 (N=364,535)	Hawai'i Population, % Children 0-18 (N =307,503)
	%	%	%
Employer	76%	75%	69%
Individual plan	5%	6%	5%
Medicaid	5%	9%	17%
Uninsured	13%	10%	9%

Source: 2001 Population Survey, Kaiser Family Foundation, www.kff.org

Economic Indicators: Adding to Hawai'i's unique cultural diversity is an economy with a significant tourism industry. Approximately 6.95 million people visited the State of Hawai'i in 2000 and 6.3 million in 2001⁴. Honolulu County is a well-established tourist destination. Direct air travel from Asia and the U.S. Mainland to the Islands of Hawai'i, Maui and Kaua'i has contributed to added growth in tourism in these counties. The presence of the Armed Forces also provide further diversity and economic growth to the state.

Health Indicators: The United Health Foundation's *State Health Rankings for 2002* ranked Hawai'i 14th using a series of health outcome measures and risk factors that placed it at a 13-year low. Increases in infant mortality and in smoking prevalence contributed to this decline in ranking as did the calculated overall decreased support for public health care.

⁴ State Department of Business, Economic Development and Tourism figures www.hawai'i.gov/dbedt/stats.htm.visitorstats

Kaiser Family Foundation's state health ranking information included the following: Infant mortality is higher in the State of Hawai'i than the national average (8.1 vs. 6.9 deaths per 1000; ranking 14th highest among the states). This occurs despite the fact that slightly more women in Hawai'i seek first trimester prenatal care than the national average (84.2% vs. 83.4%, ranking 22nd). Fewer infants are born to teenaged mothers than the national average (42.5 vs. 45.8 per 1000, ranking 25th among the states). Less than half of one percent of all births and 6% of Asian/Pacific Islander births in the US occur in Hawai'i; however, 16% of all Asian/Pacific Islander teen births in the total United States do occur in the state.

Emergency room visits are often used as an indicator of health status: Hawai'i averaged fewer visits than any other state (234 visits/1,000 population), well below the national average of 371 visits/1,000 population. Hawai'i ranked lowest in the nation for cancer death rates (155 deaths per 100,000 versus the national average of 203 per 100,000). Diabetes-related deaths are also the lowest in the nation (17 deaths per 100,000 versus the national average of 25 deaths per 100,000 adults in the total US population).

Hawai'i ranked 22nd among the states with an AIDS case rate of 10.1 per 100,000 population for 2001.⁵ The national average is 14.9. Hawai'i ranked 35th in its cumulative number of AIDS cases and 36th in its number of new cases. This topic will be further expanded when describing the scope of the epidemic.

⁵ Kaiser Family Foundation, State Rankings www.kff.org; based on CDC Surveillance Report Vol.13 No 2. www.cdc.gov/hiv/stats/hasr1302.htm Figures as of December 31, 2001

Chapter II

What is the Scope of the HIV/AIDS Epidemic in the State of Hawai'i?

This section describes the HIV/AIDS epidemic in the State of Hawai'i. It includes general demographic and geographic trends as well as characterizes the risk factors of those infected.

Summary

The HIV/AIDS epidemic has affected all racial and ethnic groups in the State of Hawai'i. A total of 2,681 cases had been diagnosed by December 31, 2001 and reported by September 15, 2003; 1533 were known to be deceased. As of September 15, 2003, there were 1,246 persons living with AIDS in the State of Hawai'i. There were a further 2,600-2,900 HIV/AIDS cases estimated to be infected but unaware of their HIV status.

New cases of AIDS were diagnosed at an increasing rate since the beginning of the epidemic; peaking in 1993. This rate of diagnosis has decreased since 1996 and is attributed to therapies made available since that time. As fewer people are dying of AIDS the number of persons living with HIV/AIDS continues to increase at the same time period.

Men who have sex with men (MSM) are still disproportionately represented among newer diagnoses (in 2001-2002), past diagnoses and those living with AIDS. The proportions of AIDS cases attributed to MSM, and MSM/IDU have decreased over time, while the proportion of AIDS cases attributed to heterosexual diagnoses continue to increase. One in ten newer AIDS cases is now among women. One in twelve cases is associated with injecting drug use in Hawai'i.

Caucasians continue to represent most of the new AIDS diagnoses and most of those living with AIDS. Combined Asian and Pacific Islanders accounted for the next largest numbers for both new diagnoses and those living with AIDS. The highest rate of AIDS diagnoses is among African Americans though the actual numbers were low. The rate among Hawaiians was slightly lower than African Americans.

Almost three-fourths of cases of AIDS are diagnosed among Oahu residents where a similar percentage of people living with AIDS are located. The number of diagnoses relative to county population size is highest in Maui which had particularly high rates in 2000-2001.

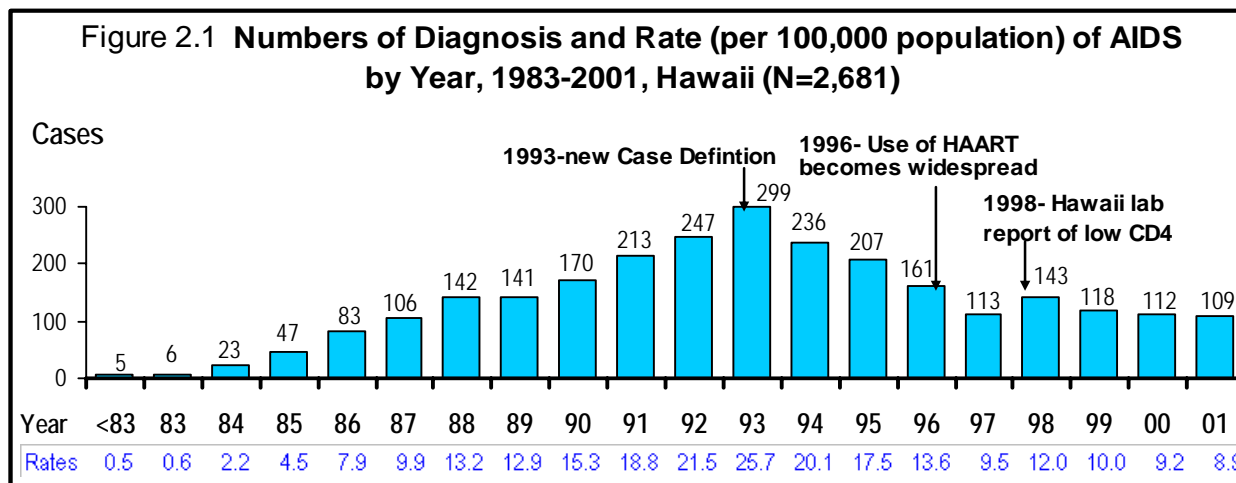
What are the Characteristics of Individuals Diagnosed with AIDS?

Presentation of Data: Data from 1996 through 2001 will be presented primarily in three two-year groupings. When small cell sizes prevent such configuration, the data will be combined in six-year totals.

AIDS Trends

As of December 31, 2001, 2,681 cases of AIDS had been diagnosed in Hawai'i and reported by September 15, 2003. The number of persons with AIDS diagnoses increased each year through 1993 (Figure 2.1). The definition of AIDS was expanded in 1993 resulting in an artificial increase in the number of AIDS cases.—A number of cases that would have otherwise met the case definition at a later time met the new definition's criteria in 1993. The decline in the number of diagnosed cases began in 1994. The development and widespread use of highly-active, anti-retroviral agents (HAART) began to reduce HIV morbidity and mortality. By 1996, the epidemiology of the disease was significantly impacted. The number of AIDS cases again increased in 1998, as Hawai'i laboratories met the new requirement to report low CD4 counts. Additional cases were identified. Beginning in 1999, AIDS incidence continued to decrease as fewer HIV-positive persons progressed to AIDS. This trend continued through 2001.

By this point in the epidemic, AIDS incidence rates no longer primarily reflected HIV incidence rates as it did previously. The data now reflect: 1) variations in HIV transmission patterns over a long period of time; 2) differences in access and use of testing and treatment options for those at risk or those already infected; and 3) potential treatment failures⁶. The bottom of Figure 2.1 shows this trend as an *incidence rate*. Incidence rates provide a measure of the effect of illness relative to the size of the population. It refers to the number of newly diagnosed cases in Hawai'i for each year divided by the population at risk in Hawai'i during the same years⁷. The incidence rates in Figure 2.1 indicate a trend consistent with the historical overview described above.



⁶ Centers for Disease Control and Prevention. Pre-Press Proof: HIV/AIDS Surveillance Update. June 2000

⁷ The formula for calculating the AIDS incidence rate follows (For example, 2001):

$$\text{Incidence rate for 2001} = \frac{109 \text{ (Number of new Diagnosed AIDS cases in 2001)}}{1,227,024 \text{ (Total population in 2001)}} \times 100,000 = 8.9 \text{ Cases / per 100,000}$$

Population are based on Hawaii census data and U.S. Bureau of the census 2001 estimates

AIDS by Gender

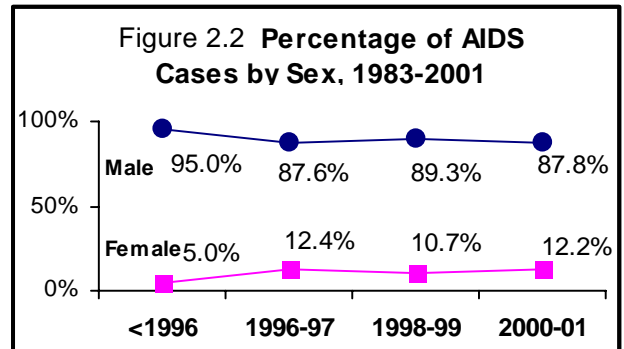
By December 31, 2001, 2,495 male (93.1%) and 186 female (6.9%) AIDS cases were diagnosed in Hawai'i.

The numbers of Hawai'i AIDS cases by gender show in Table 2.1. Males continue to account for a considerably larger proportion of the epidemic.

The actual numbers have decreased for both male and female cases between 1996 and 2001 during each two-year period continuing that downward trend. AIDS cases remained in relatively constant proportion; males represented approximately 88-89% of the cases and females approximately 11-12% (Figure 2.2). This is a change from earlier in the epidemic (before 1996) when the percentages were 95% male, 5% female.

Table 2.1 Hawai'i AIDS cases by Gender, 1983-2001

Sex	Before 1996	1996-1997	1998-1999	2000-2001	Cumulative Total	
	No.	No.	No.	No.	No.	%
Male	1,828	240	233	194	2,495	93.1%
Female	97	34	28	27	186	6.9%
Total	1,925	274	261	221	2,681	100.0%



-Combined two-year data for 2000-2001 shows the rates of diagnosed AIDS cases for male and female were 31.9 and 4.9 per 100,000 population respectively. The rate for males was 6 times the rate for females.

It should be noted that the CDC model for the state AIDS surveillance systems stratifies data collection by "Gender" with male and female categories only. At this point, transgender has not been a collection category for AIDS data in the State of Hawai'i; therefore, no further breakdown of data is available. The surveillance system does collect HIV (not AIDS) information for transgender in Hawai'i, however, that HIV data are not available at this time.

AIDS Cases by Race/Ethnicity

Single race/ethnicity group information will be used in the AIDS reporting system through 2003. Individuals are counted only in the ethnic group with which they are primarily identified. This maintains consistency with the methods used to acquire population data before 2000.

The AIDS epidemic has affected persons in all racial/ethnic groups in Hawai'i, though this effect has not been the same for all groups (Table 2.2). Caucasians comprise the majority of cumulative AIDS cases (1,700, 63.4%). When comparing the time period before 1996 to the most recent 6-year (1996-2001) period, the proportion of AIDS had declined among Caucasians (67.8% vs. 57.4%); increased among Hispanics (4.9% vs. 5.7%), African Americans (4.0% vs. 4.9%), combined APIs (24.8% vs. 31.0%), Hawaiians (9.9% vs. 12.8%), and Filipinos (4.7% vs. 6.6%).

Changes in laboratory reporting regulations in 1998 increased case finding in some groups (Figure 2.3). The 1998-1999 time periods showed an increase in new diagnoses among Caucasian and African Americans, and a decrease among Asian/Pacific Islanders and Hawaiians. During the

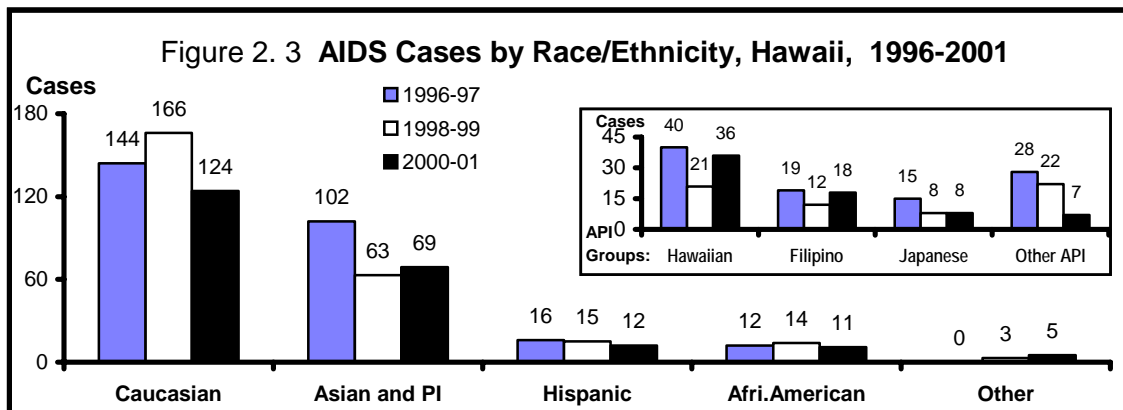
2000-2001 time period, the reverse was seen. Despite these variations, the overall relative numbers steadily declined from 1996-1997 (274 cases), 1998-1999 (261 cases), to 2000-2001 (221 cases). This decline is not consistently seen among the various racial/ethnic groups. Twelve (12) new cases among African Americans were diagnosed in 1996-1997 and 11 in 2000-2001; representing an 8% decline. Cases diagnosed among API equaled 102 in 1996-1997 and 69 in 2000-2001, representing a 32% decline. Overall, the percent changes for new AIDS diagnoses from 1996-1997 to 2000-2001 were less for African Americans (8%), Hawaiians (10.0%) and Caucasians (14%) than for Hispanics (25%) and combined APIs (32%).

Table 2.2 Hawaii AIDS Diagnosis by Race/Ethnicity^a (1983 – 2001)

Race/Ethnicity	1983- 1995		1996-2001		Cumulative (1983-2001) Total		2000-2001		
	No.	%	No.	%	No.	%	No.	No.	Rate ^b
Caucasian	1,266	65.8%	434	57.4%	1,700	63.4%	124	56.1%	32.6
Asian and PI	478	24.8%	234	31.0%	712	26.6%	69	31.2%	8.6
Hawaiian	190	9.9%	97	12.8%	287	10.7%	36	16.3%	34.7
Filipino	91	4.7%	50	6.6%	141	5.3%	18	8.1%	8.2
Japanese	86	4.5%	31	4.1%	117	4.4%	8	3.6%	3.1
Other API	111	5.8%	56	7.4%	167	6.2%	7	3.2%	3.3
Hispanic	95	4.9%	43	5.7%	138	5.1%	12	5.4%	13.7
African American	77	4.0%	37	4.9%	114	4.3%	11	5.0%	38.7
Other (Ind.)	9	0.5%	8	1.1%	17	0.6%	5	2.3%	NA
Total	1,925	100%	756	100%	2,681	100%	221	100%	18.2

^a Percentages for all groups are shown as % of total AIDS cases.

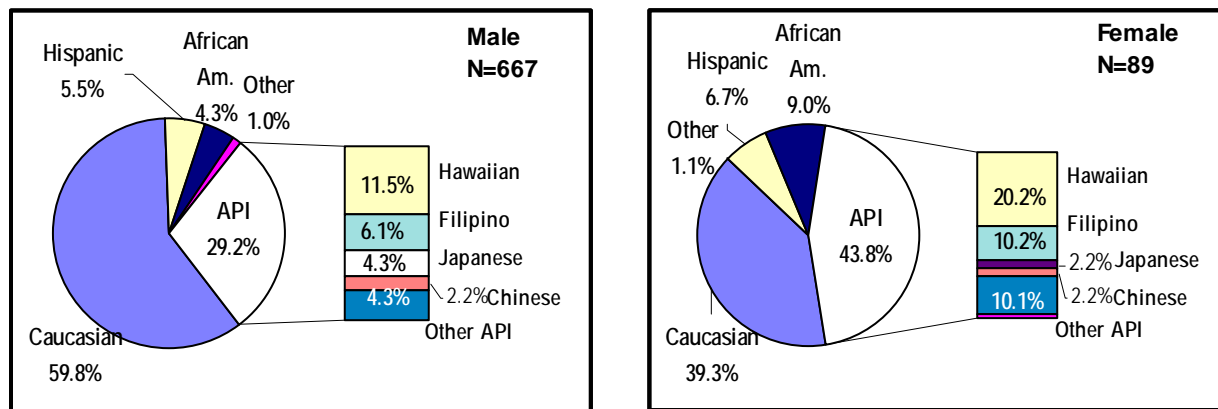
^b Using proportional allocation method to obtain the racial/ethnic subgroup populations to calculate the rate (cases/ per 100,000 persons) for 2000 – 2001 two year period.



In 2000-2001, the rate was the highest for African Americans (38.7/100,000), followed by Hawaiians (34.7), and Caucasians (32.6). The rate for Hispanics (13.7) was below the state average (18.2). The rate was the lowest for combined APIs (8.6). The rate for African Americans was slightly higher than the rates for Hawaiians and Caucasians. However, this rate was nearly 3 times the rate for Hispanics, over 4 times for combined APIs and Filipinos, and over 10 times for Japanese. The “Other API” category contains many different ethnic groups, each with too few cases to be shown separately.

Males and females within each racial/ethnic group have been affected by the AIDS epidemic differently (Figure 2.4). While 60% of male cases are Caucasian, only 39% of female cases are. Almost 44% of females are Asian/Pacific Islander (including 20% Hawaiian) while 29% of males are Asian/Pacific Islander (including 12% Hawaiian). African American women make up 9% of the cases but African American men make up only 4%. Gender-specific risk factors are discussed in depth later in the section, AIDS by Risk Factor.

Figure 2.4 Male and Female AIDS Cases by Race/Ethnicity, Hawai'i, 1996-2001



AIDS by Age

In 2000-2001, as in past years, the highest number of diagnosed cases were among persons in 35-44 years of age (97, 44%) and 25-34 years of age (54, 20%). Recent advances in HIV treatment are increasing the age at onset as the time interval from initial HIV infection to an AIDS diagnosis increases. This is likely to result in an increased age at the time of diagnosis as well as a decreased number of AIDS cases diagnosed. Table 2.3 shows the numbers decreasing in those aged 54 or younger and increasing in those aged 55-64 beginning in 1996.

Table 2.3 Hawai'i AIDS cases, by Age at Diagnosis, 1983-2001

Age	Before 1996	1996-2001			Cumulative Total	
	No.	1996-1997	1998-1999	2000-2001	No.	%
<13	13	<4	<4	<4	16	0.6%
13-24	61	8	<4	<4	74	2.8%
25-34	641	82	57	44	824	30.7%
35-44	784	108	126	97	1,115	41.6%
45-54	314	60	57	54	485	18.1%
55-64	88	11	12	17	128	4.8%
65+	24	<4	6	6	39	1.5%
Total	1,925	274	261	221	2,681	100%

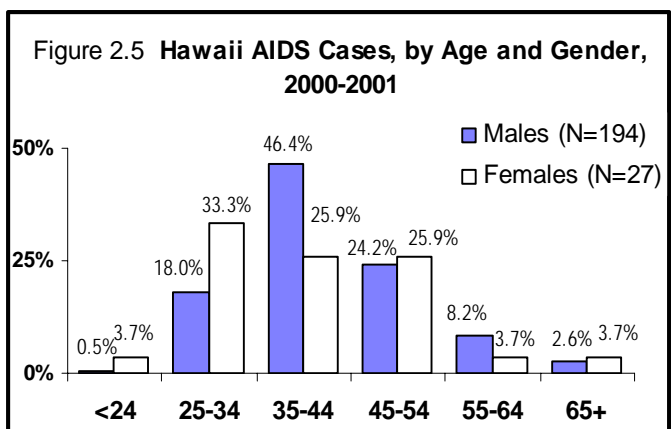


Figure 2.5 shows newly diagnosed cases of AIDS (2000-2001) by age and gender. The highest proportion of female cases were in those aged 25-34, while the highest proportion of male cases

were in those aged 35-45. Females were diagnosed with AIDS at an earlier age than males. Overtime, the number of cases for the age group 13-24 has decreased.

AIDS by Risk Factor

Mode of transmission is related to those behaviors that put an individual at risk for acquiring HIV infection. Within the individual state surveillance systems, risk information is classified in a hierarchy based on the likelihood of transmission. A person with AIDS may have had several risk factors, but only the highest priority risk is counted as the official “risk factor”. Only one dual risk, male-to-male sex also with injection drug use (MSM/IDU) is listed as a combined single risk category. No transgender AIDS data are available at this time.

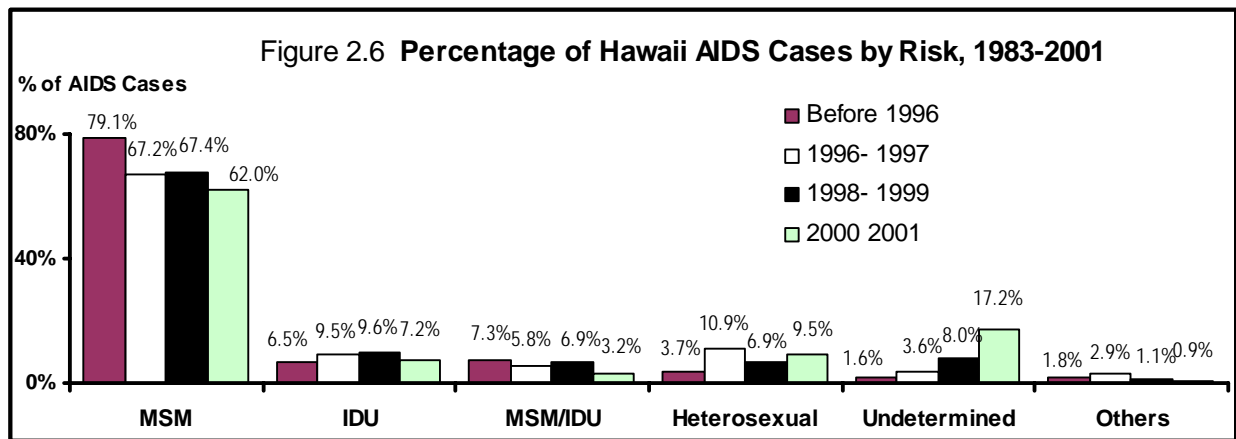
The MSM risk factor comprises the vast majority of cumulative reported AIDS cases (2,011, 75%) (Table 2.4). MSM/IDU added to that number brings the total to 2,192 (81.8%) of all AIDS cases. IDU was the second highest risk behavior, accounting for 192 AIDS cases (7.2%) of Hawai’i’s AIDS epidemic. Cumulative cases, attributed to heterosexual contact (140, 5.2%), are still relatively few

Table 2.4 Hawai’i AIDS cases by Risk Factors, 1983-2001

Risk Factor	Before 1996	1996-1997	1998-1999	2000-2001	Cumulative Total	
	No.	No.	No.	No.	No.	%
MSM	1,514	184	176	137	2,011	75.0%
IDU	125	26	25	16	192	7.2%
MSM/IDU	140	16	18	7	181	6.8%
Heterosexual	71	30	18	21	140	5.2%
Perinatal	10	<4	NA	<4	13	0.5%
Unknown	30	10	21	38	99	3.7%
Other	35	NA	<4	<4	45	1.7%
Total	1,925	274	261	221	2,681	100%

in number. Since 1996 (three two- year groupings), the number of AIDS cases attributed to all risk factor groups had declined except the “unknown risk” group.

The proportions of cases attributed to specific exposure (i.e., risk) categories have changed (Figure 2.6) since the epidemic began. Overall, the proportions of cases attributed to MSM and MSM/IDU have been declining; while those cases attributed to heterosexual contact, unknown risk, or IDU have been increasing. However, MSM still accounted for the majority of cases (137, 62%), while heterosexual contact became the second highest risk behavior (21, 9.5%) in Hawai’i in 2000-2001.



In 1996-2001, among males, three-quarters of new cases diagnosed were attributed to MSM (Table 2.5), followed by IDU (7%) and MSM/IDU (6%). Among females, 53.9% of new cases diagnosed

were attributed to heterosexual contact, and 22.5% were attributed to IDU. Heterosexual contact is the most significant risk factor among females representing 53.9% of AIDS cases. The actual number of female cases attributed to heterosexual contact is about twice that of male cases.

Males represent more than twice the number of cases attributed to IDU (47 vs. 20) than females. The actual percentage of male cases is only 7% while for female cases it is 22.5%.

Table 2.5 Hawai'i AIDS Cases, by Risk Factors and Gender, 1996-2001

Risk Factor	Male		Female		Total	
	No.	%	No.	%	No.	%
MSM	497	74.5%	-	-	497	65.7%
IDU	47	7.0%	20	22.5%	67	8.9%
MSM/IDU	41	6.1%	-	-	41	5.4%
Heterosexual	21	3.1%	48	53.9%	69	9.1%
Perinatal	<4	-	<4	-	<4	-
Unknown	54	8.1%	15	16.9%	69	9.1%
Other	6	0.9%	4	4.5%	10	1.3%
Total	667	100%	89	100%	756	100%

AIDS Mortality⁸

New treatments (HAART) became available beginning in 1996 and AIDS-related deaths declined annually. Now HIV infection is no longer one of the top fifteen leading causes of resident deaths in the State of Hawai'i for either males or females for 2001⁹.

According to data from Department of Health, Office of Health Status Monitoring, HIV infection was the leading cause of death in Hawai'i among individuals in the 25-34 age group, and was the second leading cause of death among individuals in the 35-44 age group in 1993¹⁰. Nevertheless, by 1999-2001, HIV disease (including AIDS) dropped to seventh leading cause of death among persons 25-44 years old (Table 2.6).

Table 2.6 Ranking of 10 Leading Underlying Causes of Death among Persons 25-44 Years of Age, Hawai'i, 1999-2001

Rank	Cause of Death	Deaths	Total Death N=1,362
1	Malignant Neoplasms	261	19.2%
2	Unintentional Injury	242	17.8%
3	Heart Disease	215	15.8%
4	Suicide	173	12.7%
5	Cerebrovascular	60	4.4%
6	Homicide	52	3.8%
7	HIV	43	3.2%
8	Diabetes Mellitus	24	1.8%
9	Liver Disease	22	1.6%
10	Chronic Low. Respiratory Dis.	19	1.4%

Source: Office of Statistics and Programming, National Center for Injury Prevention and Control, CDC <http://webapp.cdc.gov/cgi-bin/broker.exe>

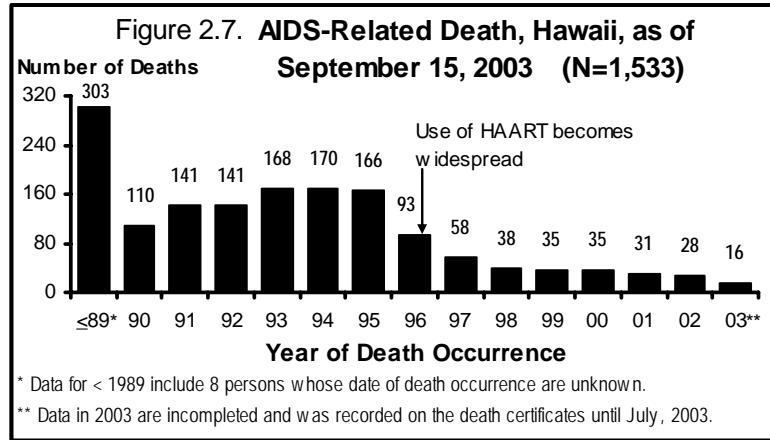
As of September 15, 2003, there were 1,533 AIDS-related deaths reported in Hawai'i: 1,451 male and 82 female.

⁸ Mortality: The number of deaths during a specific time period.

⁹ www.state.hi.us/health/stats/vr_01/death.pdf Race/ethnicity-specific data by request from Office of Health Status Monitoring, Hawai'i Department of Health.

¹⁰ Kong, VL. *Mortality due to HIV infection in Hawai'i, 1984-1993*. Research and Statistics Report; issue no 64. Honolulu, HI: Hawai'i Department of Health, Office of Health Status Monitoring.

Figure 2.7 illustrates the trend in AIDS-related death. The annual number of AIDS deaths increased through the late 1980's and the early 1990's peaking in 1994 at 170. It began to decline annually at a rate averaging approximately 38% until it largely stabilized in 1998.



The slowing of the decline in the number of deaths since 1998 may be a sign of limited access to, or use of, health care services as well as the possible limitation of current therapies among persons in care¹¹. Thirty-one deaths occurred in 2001, an 82% decrease from the peak in 1994. This trend of decreasing AIDS-related death is consistent with widespread usage of highly-active anti-retroviral agents (HAART). The mortality rate for AIDS in 1999-2001 was 8.3 cases/per 100,000 population¹², averaging 2.8 cases/100,000 per year.

Mortality proportions by racial/ethnic group before 1996 were very similar to the actual proportions of diagnosed AIDS before 1996 in those racial/ethnic groups. Racial/ethnic groups varied little more than one percent between the percentage of cases and the percentage of deaths (data not shown).

Comparing the mortality data for 1996-2001 with pre-1996 (Table 2.7), indicates that the proportions of mortality were higher in the recent time period for females (11.0% vs. 3.9%), APIs (40.3% vs. 26.2%), Hawaiians (15.5% vs. 11.0%), Filipinos (7.9% vs. 4.3%), and “other APIs” (9.7% vs. 3.7%). It was similar among Hispanics (3.4% vs. 3.8%) and African Americans (3.8% vs. 3.5%).

Table 2.7 Comparison of Persons Dying of AIDS, and Comparison of Persons dying of and living with AIDS

	Death				Living 12/31/01 N=1,154
	Before 1996		1996-2001		
	N=1,198	N=290	N=290	N=290	
Sex	No.	%	No.	%	%
Male	1,151	96.1%	258	89.0%	90.9%
Female	47	3.9%	32	11.0%	9.1%
Race/Ethnicity					
Caucasian	791	66.0%	151	52.1%	63.6%
Asian and PI	314	26.2%	117	40.3%	23.6%
Hawaiian	132	11.0%	45	15.5%	9.3%
Filipino	51	4.3%	23	7.9%	5.5%
Japanese	62	5.2%	12	4.1%	3.6%
Chinese	25	2.1%	9	3.1%	1.9%
Other API	44	3.7%	28	9.7%	3.4%
Hispanic	46	3.8%	10	3.4%	5.4%
African Am.	42	3.5%	11	3.8%	6.6%
Other (Ind.)	5	0.4%	1	0.3%	0.9%
County					
Honolulu	907	75.7%	224	77.2%	65.3%
Hawaii	142	11.9%	27	9.3%	16.6%
Maui	94	7.8%	26	9.0%	14.0%
Kauai	55	4.6%	13	4.5%	4.1%
Total	1,198	100.0%	290	100%	100.0%

¹¹ Integrated Epidemiologic Profile for HIV/AIDS Prevention and Care Planning in Louisiana, 2002, Page 34.

¹² Death data was from AIDS Surveillance and population based on U.S. 2000 population of 1,211,537.

The proportion of AIDS death were much greater among males than among females. In 1996-2001, most of the persons with AIDS who died were male (89.0%), which is similar to the proportion of male persons living with AIDS (90.9%). Although Asian and Pacific Islanders represented 23.6% of persons living with AIDS in 1996-2001, they comprised 40.3% of persons who died. This can also be seen in Hawaiians (9.3% vs. 15.5%), Filipinos (5.5% vs. 7.9%), and other API (3.4% vs. 9.7%). Honolulu County had a higher proportion of persons whose deaths were attributable to AIDS than persons living with AIDS. These disparities could be the result of a different response to the disease or reduced use or access to care.

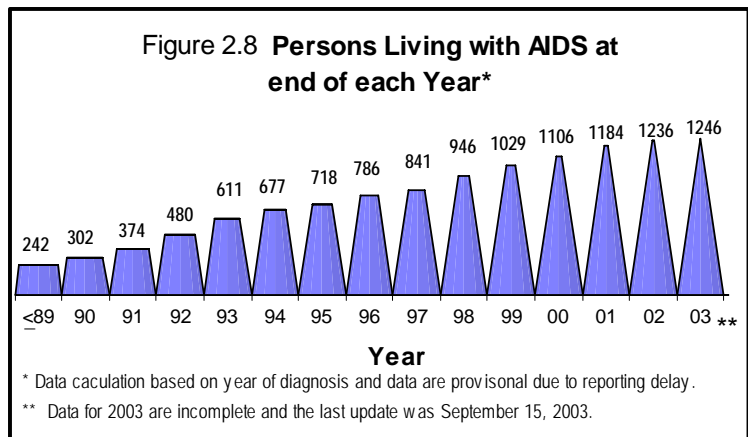
Persons Living With HIV/AIDS

HIV prevalence¹³ for 2001 cannot be measured by the existing Hawai'i HIV surveillance system due to a pending evaluation. This surveillance system began collecting data on August 27, 2001 and will requires further review and analysis to meet the CDC quality assurance standards for reliable data. There were 2,600-2,950 cases of HIV infection at the end of 2001 estimated by the HIV/AIDS Surveillance Program using a standardized CDC formula¹⁴. That estimated number includes persons with a diagnosis of HIV or AIDS and those who may be infected but are unaware of their HIV status.

Persons Living With AIDS (Prevalence) in the Population

The number of newly-diagnosed AIDS cases each year is exceeding the number of deaths; therefore, the number of persons living with AIDS continues to increase (Figure 2.8). Through September 15, 2003, a total of 1,246 persons were living with AIDS in Hawai'i, resulting in a prevalence rate of 100.1 AIDS cases per 100,000 population¹⁵.

The number of persons living with AIDS (1,246) was over 100% higher than in 1993. The number of persons living with AIDS increased on the average of 8.6% every year from 1996-2001 even as the number of newly-diagnosed individuals decreased. The increase is likely to be a result of successful treatment therapies decreasing the number of deaths.

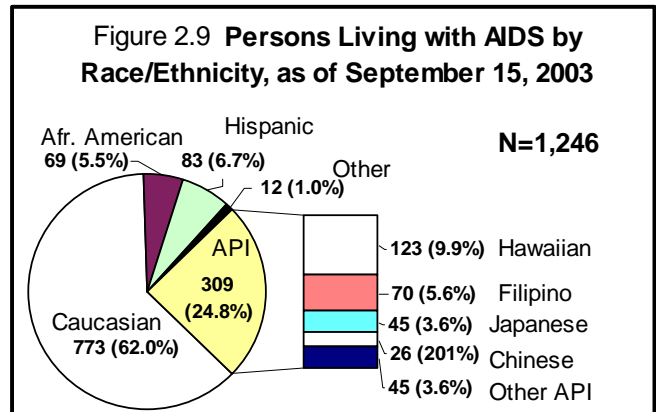


¹³ Prevalence: the number of new and pre-existing cases alive on a certain date

¹⁴ Hawai'i Communicable Disease Report: July/August 2003

¹⁵ Population based on the 2002 population estimate of 1,244,898.

Those persons reported living with AIDS are 1,128 (90.5%) male and 118 (9.5%) female. The majority of individuals living with AIDS were Caucasians (773 cases, 62%) (Figure 2.9), followed by APIs (309 cases, 24.8%), Hispanics (83 cases, 6.7%), African-Americans (69 cases, 5.5%), and other (12 cases, 1.0%). Among APIs, Hawaiians accounted for 9.9% (123 cases) of total living AIDS cases, followed by Filipinos (70 cases, 5.6%), Japanese (45 cases, 3.6%), and Chinese (26 cases, 2.1%). Other APIs were combined (45 cases, 3.6%).



Note: % of total for all Race/Ethnicity

Figure 2.10 and Table 2.8 shows persons living with AIDS stratified by risk behavior. The majority of people living with AIDS are associated with MSM as their risk factor (861 cases, 69.1%). The second most frequent risk behavior was IDU (102 cases, 8.2%). Heterosexual contact accounted for 88 cases (7.1%) and MSM/IDU (87 cases, 7.0%). Those with undetermined risk factors accounted for 83 cases (6.7%).

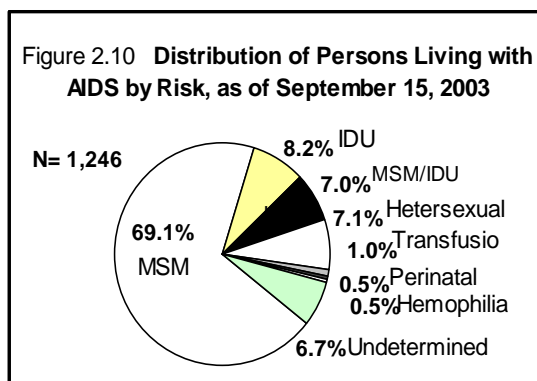
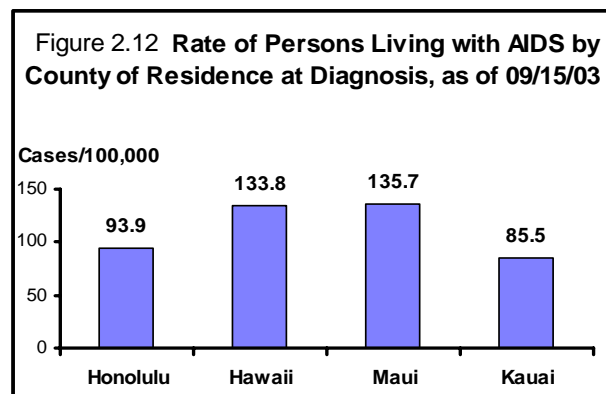
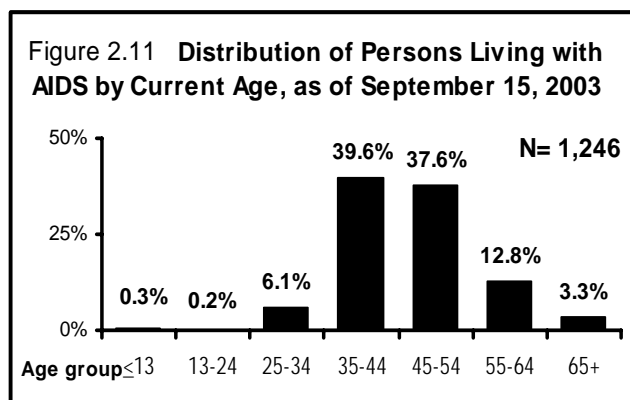


Table 2.8 Persons Living with AIDS by Select Characteristic, as of September 15, 2003

Risk	No.	Current Age	County	No.
MSM	861	<13	Honolulu	823
IDU	102	13-24	Hawaii	199
MSM/IDU	87	25-34	Maui	174
Heterosexual	88	35-44	Kauai	50
Transfusion	13	45-54	Total	1,246
Perinatal	6	55-64		
Hemophilia	6	65+		
Undetermined	83	Total		
Total	1,246			

As of September 15, 2003, most persons living with AIDS (963, 77.2%) had a current age of 35-54 years old. (Table 2.8/ Figure 2.11) Only 0.5% was under the age of 25. Honolulu County had the highest number and percentage of AIDS cases (823 cases, 66.1%), followed by Hawai'i



County (199 cases, 16.0%), Maui County (174 cases, 14.0%), and Kaua'i County (50 cases, 4.0%). When the PLWA cases were adjusted for population size (Figure 2.12), Maui County had the highest prevalence (135.7 per 100,000) followed by Hawai'i County (133.8 per 100,000), Honolulu County (93.9 per 100,000), and Kaua'i County (85.5 per 100,000).

How do the Characteristics of Recently Diagnosed Individuals with AIDS Compare with Persons Living with AIDS?

Recently diagnosed AIDS cases and Persons Living With AIDS (PLWA): Cases diagnosed in 2000 and 2001 and reported by September 15, 2003 are shown in comparison with all cases of People living with AIDS as of December 31, 2001. It is important to note that these are not mutually exclusive groups; but rather a way of viewing incidence (new cases) and prevalence (existing cases), respectively. Incidence data can then generally be used to focus on prevention and treatment efforts while prevalence data (PLWA cases) can then generally be used to focus on treatment and support services. The 2000-2001 new cases that are still living would also be contained in the PLWA category thus diluting the differences but not the usefulness of the information.

Throughout the course of the AIDS epidemic males have been disproportionately over represented among the newly diagnosed and Persons Living with AIDS (Table 2.9). However, in the current 6-year period under review, females have slightly increased in proportion among the newly diagnosed - consistent with a nationwide trend. Asian/Pacific Islanders, particularly Hawaiians and Filipinos, are seen in increased proportions among the newly diagnosed as compared with those living with AIDS. Small decreases are seen between the groups of Caucasian, Hispanic and African Americans. The newly diagnosed are younger than those living with AIDS. Twenty percent of new cases are 25-34, while only 6% of those living with AIDS are that age.

Thirty-two percent of new cases are 45-64 while almost 50% of PLWA are 45-64. Those 65 and over represent approximately 3% in both groups. Proportionately more new cases are being diagnosed on Maui (17% versus 14%); more PLWA are living on Hawai'i (16.6% versus 12.7%). There is little difference in percentage between the new cases and the PLWA on both O'ahu and Kaua'i.

Men who have sex with men (MSM) are still the majority of both new cases and persons living with AIDS (PLWA). Unknown risk factors represent only 5% of PLWA but more than 17% of the 2000-2001 cases. Slight increases have occurred among new heterosexual cases and slight decreases among injecting drug users (IDU) and MSMs who are also IDUs.

HIV Co-infection (Tuberculosis)

There were 1,016 cases of Tuberculosis and 756 cases of AIDS reported to the Hawai'i Department of Health between 1996 and 2001. Seven cases (0.7%) were co-infected during this same time period. The demographic profile of these populations is very similar (Data not shown). The cumulative total for AIDS/TB co-infection from 1983 to 2001 is 36.

Table 2.9 A Comparison of new AIDS cases in 2000-2001 and People Living with AIDS
As of December 31, 2001

Characteristic	New Case (2000-2001)		PLWA 12/31/01	
	No.	%	No.	%
Sex				
Male	194	87.8%	1,049	90.9%
Female	27	12.2%	105	9.1%
Race/Ethnicity				
Caucasian	124	56.1%	734	63.6%
Asian and PI	69	31.2%	272	23.6%
Hawaiian	36	16.3%	107	9.3%
Filipino	18	8.1%	63	5.5%
Japanese	8	3.6%	41	3.6%
Chinese	<4	1.4%	22	1.9%
Other API	4	1.8%	39	3.4%
Hispanic	12	5.4%	76	6.6%
African Am.	11	5.0%	62	5.4%
Other (Ind.)	<4	0.5%	7	0.6%
Multi-race	4	1.8%	<4	0.3%
Age				
<13	<4	0.5%	4	0.3%
13-24	<4	0.9%	<4	0.3%
25-34	44	19.9%	67	5.8%
35-44	97	43.9%	469	40.6%
45-54	54	24.4%	431	37.3%
55-64	17	7.7%	143	12.4%
65+	6	2.7%	37	3.2%
County				
Honolulu	147	66.5%	753	65.3%
Hawai'i	28	12.7%	192	16.6%
Maui	38	17.2%	162	14.0%
Kaua'i	8	3.6%	47	4.1%
Exposure Category				
MSM	137	62.0%	815	70.6%
IDU	16	7.2%	97	8.4%
MSM/IDU	7	3.2%	82	7.1%
Heterosexual	21	9.5%	80	6.9%
Perinatal	<4	0.5%	5	0.4%
Unknown	38	17.2%	58	5.0%
Other	<4	0.5%	17	1.5%
Total	221	100.0%	1,154	100.0%

*includes 3 unknown status

Geographic Distribution of AIDS in Hawai'i

AIDS cases by county of residence at the time of diagnosis are shown in Figure 2.13 and Table 2.10. Honolulu County has consistently had the highest number and proportion of resident AIDS cases (71%, 1,913 cases) throughout the epidemic. Hawai'i County has the second highest overall number of cases averaging 13% of the total in the three two-year time periods as well as the cumulative total. Since 1998-1999 Maui County's proportion of cases rose to 17%, the second highest number of cases. When the actual numbers are adjusted by the population size for each county, Maui has the highest rate of cases, 29.6 per 100,000 residents. The rates for Hawai'i, Honolulu and Kaua'i are 18.8, 16.8 and 13.7 per 100,000 residents, respectively.

As of September 15, 2003, Honolulu County had the highest number and percentage of persons living with AIDS, followed by Hawai'i County, Maui County, and Kaua'i County (Table 2.10). When the PLWA cases were adjusted for population size, Maui County had the highest prevalence (135.7 per 100,000) followed by Hawai'i County (133.8 per 100,000), Honolulu County (93.9 per 100,000), and Kaua'i County (85.5 per 100,000).

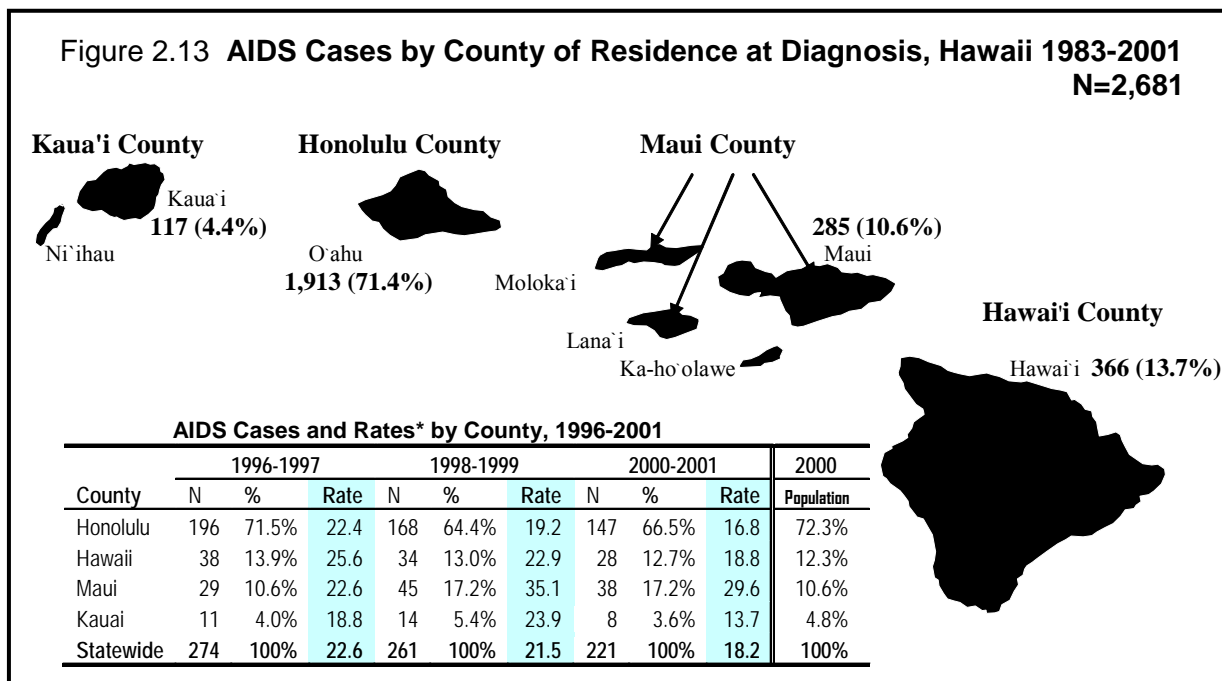


Table 2.10 Hawai'i AIDS cases (1983-2001) and Persons Living with AIDS by County

County	AIDS cases						PLWA (as of 09/15/03)	
	Before 1996		1996-2001		Cumulative Total		No.	%
	No.	%	No.	%	No.	%		
Honolulu	1,402	72.8%	511	67.6%	1,913	71.4%	823	66.1%
Hawai'i	266	13.8%	100	13.2%	366	13.7%	199	16.0%
Maui	173	9.0%	112	14.8%	285	10.6%	174	14.0%
Kaua'i	84	4.4%	33	4.4%	117	4.4%	50	4.0%
Total	1,925	100%	756	100%	2,681	100%	1,246	100%

AIDS in Honolulu County

Honolulu County is the most densely populated of the island counties containing 72% of the total state population. As of December 2001, 1,913 (67.6%) AIDS cases were diagnosed in Honolulu County. In 1996-2001, there were 511 newly diagnosed cases, 453(89%) male and 58(11%) female. The 2-year combined incidence rates gradually declined from 22.4 cases per 100,000 in 1996-1997 to 16.8 cases per 100,000 in 2000-2001 (Figure 2.13). The 2000-2001 rate of AIDS in the Honolulu County was the third highest statewide.

Figure 2.14 indicates a large decrease (almost two-thirds) in the number of male cases. The number of females cases is only slightly less between 1983-1996 and 1996-2001. The reduction in males is most likely a result of the reduction in MSM cases. The females represent an increasingly apparent trend in heterosexual risk and “other”.

Honolulu County has 823 (66.1%) of the 1,246 persons living with AIDS (PLWA) (Figure 2.15). Honolulu County has a rate of 93.9 cases of PLWA per 100,000 giving it the third highest concentration of AIDS cases in the state. Ninety-three percent of the PLWA cases are male.

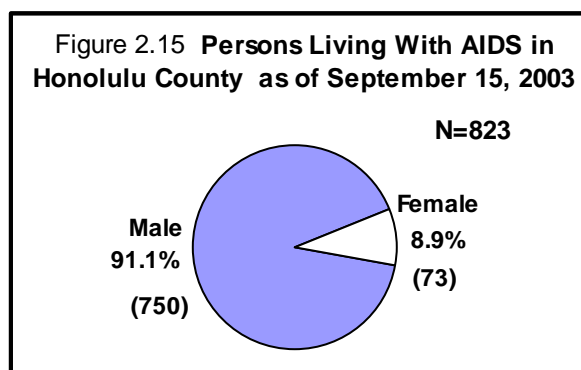
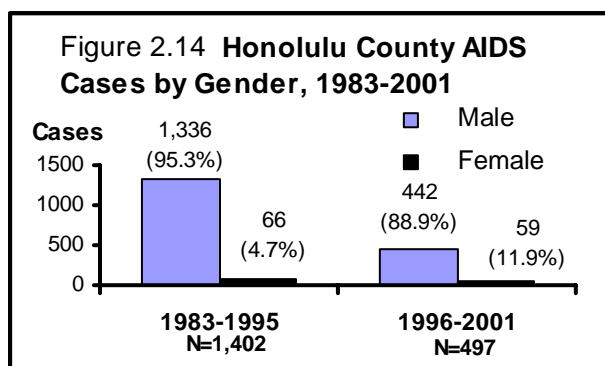


Table 2.11 illustrates cases from 1996-2001 for Honolulu County and its districts. The county AIDS profile for gender, risk and race/ethnicity was a similar to data in the state profile. By district, the more rural areas of Central, Leeward, and Windward O`ahu indicate much higher percentages of females. The Honolulu District has proportionately fewer female cases. This is consistent with the higher percentage of MSM cases in the Honolulu District but does not explain Central O`ahu’s higher percentage of males, but fewer MSM cases. A higher percentage of cases in this area are classified by risk factor as “Other”. This might possibly be explained by reporting habits of physicians in this area.

Risk associated with heterosexual contact is concentrated in Leeward and Windward O`ahu while IDU as a risk is concentrated more in Central O`ahu and Honolulu district.

Caucasians are more concentrated in the Honolulu and Windward Districts. Asian/Pacific Islanders, most notably Hawaiians and Filipinos, are concentrated in the Central district. The Leeward District appears to have a concentration of cases among Hawaiians.

Table 2.11 AIDS Cases by District, Honolulu County, 1996-2001

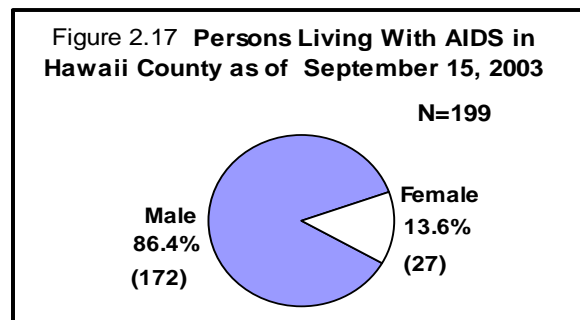
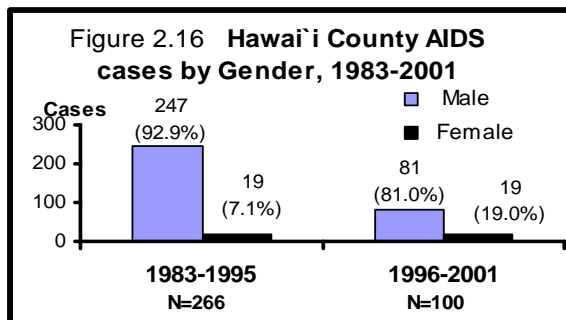
	Central		Honolulu		Leeward		Windward		Hon.County*		Statewide	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Gender												
Male	46	83.6%	319	91.9%	41	80.4%	36	81.8%	453	88.9%	667	88.2%
Female	9	16.4%	28	8.1%	10	19.6%	8	18.2%	58	11.1%	89	11.8%
Risk												
MSM	28	50.9%	247	71.2%	28	54.9%	27	61.4%	337	66.4%	497	65.7%
IDU	6	10.9%	33	9.5%	<4	-	<4	-	45	8.9%	67	8.9%
MSM/IDU	<4	-	21	6.1%	4	7.8%	<4	-	29	5.6%	41	5.4%
Hetero	5	9.1%	22	6.3%	8	15.7%	8	18.2%	44	8.7%	69	9.1%
Other	15	27.3%	24	6.9%	8	15.7%	5	11.4%	56	10.5%	82	1.7%
Race/Ethnicity												
Caucasian	14	25.5%	204	58.8%	17	33.3%	24	54.5%	264	52.1%	434	57.4%
Asian/PI	32	58.2%	103	29.7%	24	47.1%	13	29.5%	179	34.6%	234	31.0%
Hawaiian	11	20.0%	36	10.4%	12	23.5%	7	15.9%	67	13.3%	95	12.6%
Filipino	10	18.2%	16	4.6%	7	13.7%	<4	-	38	6.8%	49	6.5%
Japanese	4	7.3%	18	5.2%	0	-	0	-	22	4.4%	30	4.0%
Chinese	<4	-	9	2.6%	<4	-	<4	-	14	2.6%	17	2.2%
Other API	5	9.1%	24	6.9%	4	7.8%	4	9.1%	38	7.4%	43	5.7%
Hispanic	<4	-	17	4.9%	6	11.8%	4	9.1%	29	5.8%	43	5.7%
African Amer.	5	9.1%	23	6.6%	<4	-	<4	-	34	6.6%	37	4.9%
Other	<4	-	0	0.0%	<4	-	<4	-	5	0.8%	8	1.1%
Total	55	100%	347	100%	51	100%	44	100%	511	100%	756	100%

* Include 14 Honolulu cases that could not be identified as belonging to any these 4 areas.

AIDS in Hawai'i by County

Hawai'i County, the most rural of all the counties, is home to 12.3% of the State's population. As of December 2001, 366 (13.7%) AIDS cases had been diagnosed in Hawai'i County. In 1996-2001, there were 100 new diagnoses, 80 (80%) male and 20 (20%) female. The 2-year combined incidence rates gradually declined from 25.6 cases per 100,000 in Hawai'i County was the second highest in the State.

Figure 2.16 illustrates the changing proportion in female cases of AIDS in Hawai'i County. The actual numbers are the same in the two comparison periods (1983-1995 and 1996-2001) however, the number of males has dropped by about two-thirds.



One hundred ninety-nine persons living with AIDS (PLWA) in Hawai'i County comprise 16% of the total number of PLWA throughout the state. The rate of PLWA is 133.8 per 100,000 for Hawai'i County. It is the second highest concentration of AIDS cases in the state. Fourteen percent (27) are women (Figure 2.17).

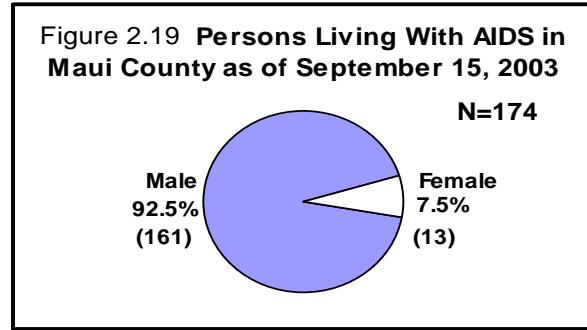
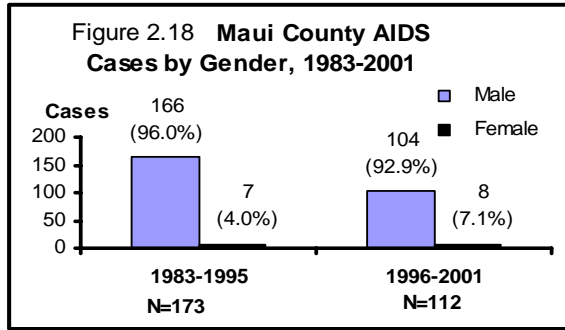
Table 2.12 illustrates cases from 1996-2001 by Hawai'i County and its two districts. Higher proportions of AIDS cases were among female (20%), Caucasians (63%), Hawaiians (15%) and cases due to heterosexual contact (16%) than that of the overall state average. Both district's gender proportions are equal and represent the highest percentages of female cases throughout the state. Hilo seems to have a higher concentration of cases associated with IDU. The relative numbers of Caucasians are the same for both districts although the percentage is higher for Kona. Asian Pacific Islanders subgroups are more concentrated in Hilo.

Table 2.12 Hawaii County AIDS Cases, 1996-2001

	Kona (West)		Hilo (East)		Hawaii County		Statewide	
	No.	%	No.	%	No.	%	No.	%
Gender								
Male	36	80.0%	44	80.0%	80	88.2%	667	88.2%
Female	9	20.0%	11	20.0%	20	11.8%	89	11.8%
Risk								
MSM	27	60.0%	27	49.1%	54	65.7%	497	65.7%
IDU	0	0.0%	10	18.2%	10	8.9%	67	8.9%
MSM/IDU	<4	-	<4	-	6	5.4%	41	5.4%
Hetero	8	14.5%	8	17.8%	16	88.5%	69	88.5%
Other	7	12.7%	7	15.6%	14	1.7%	13	1.7%
Race/Ethnicity								
Caucasian	32	71.1%	31	56.4%	63	57.4%	434	57.4%
Asian/PI	8	17.8%	20	36.4%	28	31.0%	234	31.0%
Hawaiian	5	11.1%	10	18.2%	15	12.6%	95	12.6%
Filipino	<4	-	4	7.3%	6	6.5%	49	6.5%
Japanese	0	-	4	7.3%	4	4.0%	30	4.0%
Other API	<4	2.2%	<4	3.6%	<4	7.9%	60	7.9%
Hispanic	<4	-	<4	-	5	5.7%	43	5.7%
African Amer.	<4	-	<4	-	<4	-	37	4.9%
Other	<4	-	<4	-	<4	-	8	1.1%
Total	45	100%	55	100%	100	100%	756	100%

AIDS in Maui County

Maui County is one of the fastest growing of the four counties, having experienced a population increase from 9.1% to 10.5% from the 1990 US Census to the 2000 US Census. As of December 2001, 285 (10.6%) AIDS cases were diagnosed in Maui County. The 2000-2001 Maui AIDS rate of 29.6 cases per 100,000 was the highest county rate in the state, well above the overall average state rate of 18.2 per 100,000. The case rates increased from 22.6 per 100,000 in 1996-1997 to 35 per 100,000 in 1997-1998, finally declining to 29.6 per 100,000 in 2000-2001.



In 1996-2001, there were 112 (14.8%) newly-diagnosed AIDS cases, 104 (93%) male and 8 (7%) female (Figure 2.18). The few numbers of female cases on Maui have remained consistent throughout the epidemic. The male cases have decreased, but to a much lesser degree than the other counties.

A total of 174 (14% of the total) PLWA were diagnosed in Maui (Figure 2.19). This is the highest rate for any county in the State of Hawai'i. Only 7.5% are female. The rate of PLWA is 135.7 per 100,000.

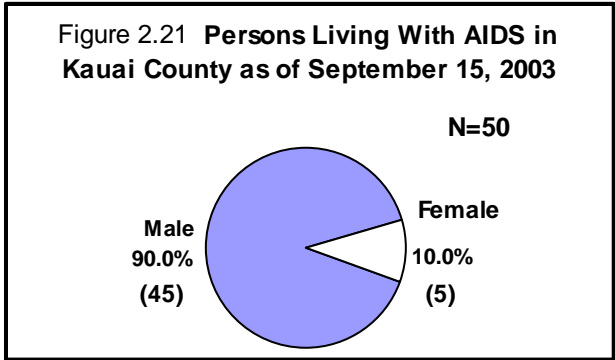
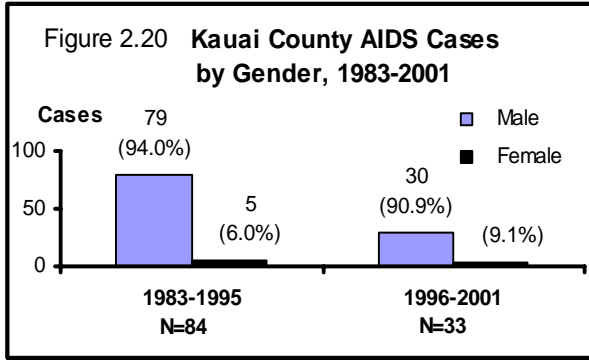
Table 2.13 illustrates cases from 1996-2001 by Maui County. Higher proportions of AIDS cases were among males (93%), Caucasians (70%), Hispanics (7%) and cases due to MSM (77%) than the overall state average. Few Maui cases are Asian Pacific Islanders; none are African Americans.

Table 2.13 Maui County AIDS Cases, 1996-2001

	Maui		Statewide	
	No.	%	No.	%
Gender				
Male	104	92.9%	667	88.2%
Female	8	7.1%	89	11.8%
Risk				
MSM	86	76.8%	497	65.7%
IDU	7	6.3%	67	8.9%
MSM/IDU	5	4.5%	41	5.4%
Hetero	8	7.1%	69	9.1%
Other	<4	0.9%	13	1.7%
Undetermined	5	4.5%	69	9.1%
Race/Ethnicity				
Caucasian	78	69.6%	434	57.4%
Asian/PI	24	21.4%	234	31.0%
<i>Hawaiian</i>	12	10.7%	95	12.6%
<i>Filipino</i>	4	3.6%	49	6.5%
<i>Japanese</i>	4	3.6%	30	4.0%
<i>Chinese</i>	2	1.8%	17	2.2%
<i>Other API</i>	2	1.8%	43	5.7%
Hispanic	8	7.1%	43	5.7%
African Amer.	0	0.0%	37	4.9%
Amer.Ind/Multi	2	1.8%	8	1.1%
Total	112	100%	756	100%

AIDS in Kaua'i County

Kaua'i County has had a cumulative total of 117 AIDS cases between 1983 and 2001, 4.4% of the state total. Kaua'i represents 4.8% of the total state population. A total of 33 cases were diagnosed in 1996-2001, 30 male and 3 female. The incidence rates were increased from 18.8 per 100,000 in 1996-1997 to 23.9 per 100,000 in 1997-1998, and then decreased to 13.7 per 100,000 in 2000-2001. The 2000-2001 Kaua'i AIDS rate was the lowest among counties within State of Hawai'i.



The number of females being diagnosed from the County of Kaua'i has remained constant over the course of the epidemic while the number of males has been reduced by more than half (Figure 2.20).

Fifty persons (50/1246, 5%) living with AIDS (PLWA) are on the Island of Kaua'i as of December 31, 2001, 45 male and 5 female (Figure 2.21). The rate of PLWA is 85.5 per 100,000. This is the lowest density of cases for any county in the state.

Table 2.14 illustrates cases from 1996-2001 by Kaua'i County. Most cases were Caucasian (88%) and had IDU (15%) as the mode exposure to AIDS infection. These proportions are higher than the statewide averages (57% and 9%, respectively).

Table 2.14 Kaua'i County AIDS Cases, 1996-2001

	Kaua'i		Statewide	
	No.	%	No.	%
Gender				
Male	30	90.9%	667	88.2%
Female	<4	-	28	3.7%
Risk				0.0%
MSM	20	60.6%	497	65.7%
IDU	5	15.2%	67	8.9%
MSM/IDU	<4	-	41	5.4%
Hetero	<4	-	69	9.1%
Other	<4	-	13	1.7%
Undetermined	5	15.2%	69	9.1%
Race/Ethnicity				0.0%
Caucasian	29	87.9%	434	57.4%
Asian/PI	<4	-	234	31.0%
Hispanic	<4	-	43	5.7%
Other	0	0.0%	45	6.0%
Total	33	100%	756	100%

Chapter III

How Does HIV/AIDS Infection Affect Various Populations in the State of Hawai'i?

The purpose of this section is to characterize the various groups affected by HIV/AIDS infection. Measures of risk factors and outcomes, both direct and indirect, are examined in several segments of Hawai'i's population.

Summary

Overall, the number of AIDS cases in every ethnic group has declined in the recent six year period.

Three out of four cases of AIDS throughout the epidemic had as a risk behavior, men who have sex with men. In 1996-2001 it declined to two out of three cases. Along with increases in syphilis among MSM, there have been increases in HIV/syphilis co-infection. Caucasians comprise 61% (303) of Hawai'i MSM AIDS cases. Seventy one percent of AIDS cases have been reported in the combined risk behavior group of MSM and MSM/IDU in 1996-2001.

Almost one in ten AIDS cases diagnosed in 1996-2001 was an injection drug user; one in six was injection drug use-related. One in three female AIDS cases had injection drug use as a risk behavior while only one in twenty men did. Asians and Pacific Islanders had the highest number of cases with heterosexual contact as their mode of exposure to HIV/AIDS. More than twice as many female cases of AIDS were attributed to heterosexual contact as males. Heterosexual AIDS cases were diagnosed at an earlier age than AIDS cases with other modes of transmission.

Women accounted for an increasing proportion of AIDS cases but the number remains small when compared with men. Few new cases of AIDS are found among individuals under the age of 25. Almost half were Asian Pacific Islanders. Nine out of ten individuals age 13-19 were Asian Pacific Islanders. Pediatric cases have averaged less than one case per year throughout the epidemic.

Hawaiian/Part Hawaiians have had the third largest number of total AIDS cases throughout the epidemic and the second highest rate of AIDS cases – almost twice the States overall rate of 18.2 cases per 100,000. One in five female AIDS cases is Hawaiian.

There is still no way to clearly define or measure risk of infection in the general population from Hawai'i's HIV testing patterns. Perceived and/or real changes in testing accessibility and the possibility of repeat testing are two such issues that are problematic. In 2002, six of every 1,000 individuals tested positive in the statewide DOH counseling and testing program.

Men who have Sex with Men (MSM)

In Hawai'i, MSM behavior is the most frequently reported AIDS risk factor. Figure 3.1 shows that 2,011 cases or 75% of all cases reported from 1983 through December 2001 were associated with MSM. During the six year period, 1996-2001, the majority of Hawai'i's total AIDS cases continued to be the MSM group (496/756, 65.7%).

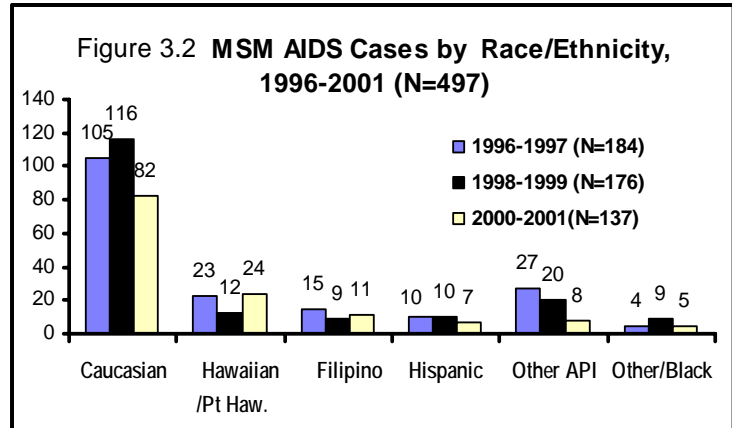
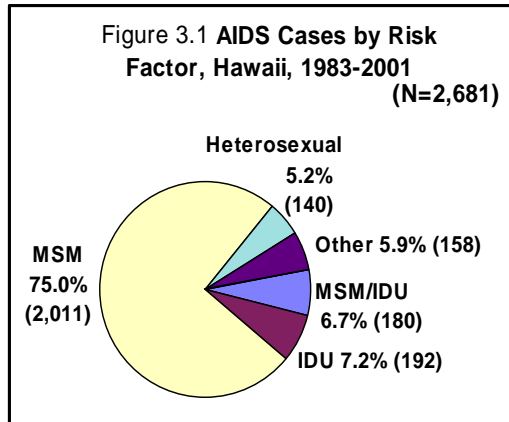


Figure 3.2 and Table 3.1 illustrates the details in the number and percentage of AIDS cases by race/ethnicity among the MSM group. The number of new cases diagnosed among MSM in 1996-2001 was 497 cases. The highest number of cases was among Caucasians 303 (61%), Hawaiians 59 (12%), and Filipinos 35 (7%).

The overall numbers of AIDS cases related to MSM have decreased for all race/ethnic groups (except Hawaiians) for the three two-year periods. The number of MSM AIDS cases for Caucasian declined from

105 cases in 1996-1997 to 82 cases in 2000-2001. The number of MSM AIDS cases among Hawaiians had slightly increased from 23 cases in 1996-1997 to 24 cases in 2000-2001. The rest of the groups are too small to accurately analyze any trends

Among the cumulative MSM AIDS cases, the majority of cases (835, 41.5%) are aged 35-44, 31% are in the 25-34 age group.

For the current 6-year period (Figure 3.3), the majority of cases are 35-44 (223, 44.9%). Similar numbers were diagnosed between 25-34 (119, 23.9%) and 45-54 (113, 22.7%). Almost 31% of

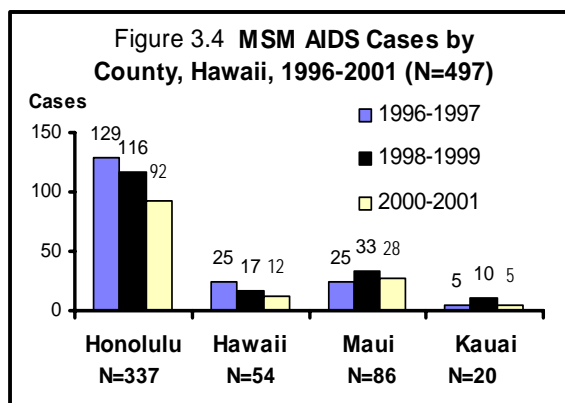
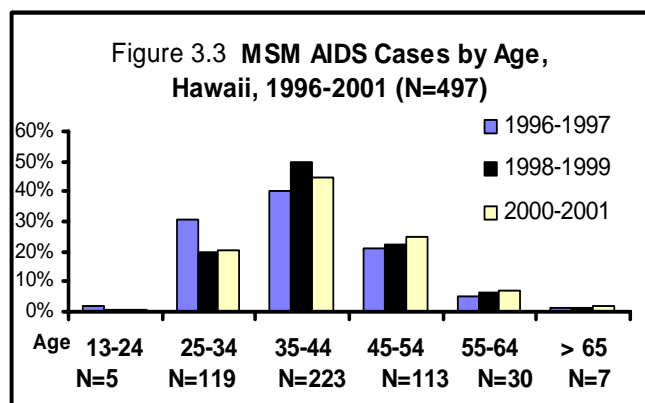
Table 3.1 MSM AIDS Cases by Race/Ethnicity, 1983-2001

Race/Ethnicity	<1996		1996-2001		Cumulative	
	No.	%	No.	%	No.	%
Caucasian	1,019	67.3%	303	61.0%	1,322	65.7%
Asian and PI	371	24.5%	149	30.0%	520	25.9%
Hawaiian	149	9.8%	59	11.9%	208	10.3%
Filipino	69	4.6%	35	7.0%	104	5.2%
Japanese	69	4.6%	20	4.0%	89	4.4%
Chinese	34	2.2%	13	2.6%	47	2.3%
Other API	50	3.3%	23	4.6%	73	3.6%
Hispanic	70	4.6%	27	5.4%	97	4.8%
African Am.	50	3.3%	13	2.6%	63	3.1%
Others	4	0.3%	5	1.0%	9	0.4%
Total	1,514	100%	497	100%	2,011	100%

% of total Hawai'i MSM AIDS Cases.

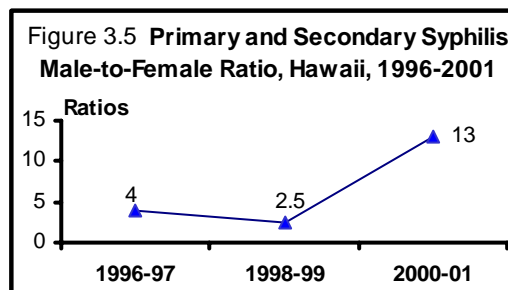
MSM cases were diagnosed in the 1996-1997 time period in the 25-34 age group. Only 20% were diagnosed in the same age group in 2000-2001. MSM AIDS cases were diagnosed at a later age in 2001-2002 as compared with 1996-1997.

Figure 3.4 illustrates that the vast majority of MSM AIDS cases for the combined six years were located in Honolulu County (337, 68%) followed by Maui County (86, 18%). Hawai'i County (54, 10%) and Kaua'i County (20, 4%) had lesser proportions. Honolulu and Hawai'i had an overall reduction in the relative numbers of cases and Maui had an increase.



*Less than 4 cases are between 13 and 19.

STD surveillance data may provide information about trends in high-risk sexual behaviors. One indirect measure to indicate such trend is the male-to-female (M:F) ratio. As indicated in Figure 3.5, the primary and secondary (P&S) syphilis M:F ratio increased from 2.5 in 1998-1999 to 13 in 2000-2001. It continued to increase in 2003 where P&S syphilis cases were all males. The M:F Syphilis ratio seems to show early signs of increasing syphilis morbidity among MSM.



During 2001-2003, the number of P&S syphilis cases among MSM in Hawai'i increased from seven to 18 (Table 3.2). Moreover, between November 14 and December 20, 2003, there was an outbreak of early syphilis (i.e. P&S and Early Latent¹⁶) among

Table 3.2 Characteristics of MSM Syphilis Cases

	2001		2002		2003		Nov 14-Dec 20, 2003	
Total	7		13		18		12	
HIV Coinfection	2/5	40%	5/11	45%	10/17	59%	8/11	82%
Local Acquired	4	57%	11	85%	15	83%	10	83%
Out of State Acq.	3	43%	2	15%	3	17%		
Median, Age Range	46 (36-55)		44 (26-60)		40 (23-55)		40 (23-49)	
Afr.American	-		1	8%	2	11%	2	16%
API	3	43%	4	31%	6	33%	5	42%
White	4	57%	8	69%	10	56%	5	42%
Sex for Money/Drugs	2	30%	2	15%	1/16	6%		
Meet partner via Internet	1	15%	1	8%	6	33%	5	42%

¹⁶ Early latent syphilis is a stage of syphilis infection when initial infection occurred within the previous 12 months.

MSM resulting in 12 syphilis cases for this period.

There is a changing epidemiological profile of early syphilis cases in Hawaii. Prior to 2000, early syphilis cases were heterosexual who acquired syphilis out of state. Increasing, since 2001, majority of early syphilis cases were amongst MSM who are also infected with HIV/AIDS. Most of the syphilis infections were acquired in Hawaii and diagnosed by private providers. Reasons for the resurgence of syphilis in Hawaii include unprotected sex and a large number of sex partners, many of whom are not locatable.

Minimum age among these early syphilis cases is decreasing. In 2001, the age range of MSM syphilis clients was 36 -55 years old as compared to 23–55 years old in 2003. Racial distribution continues to be primarily among white (56%) and API (33%).

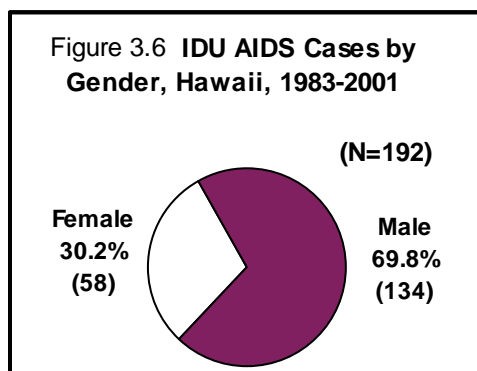
As in major cities who have had syphilis outbreak among MSM, the use of internet has made an impact in syphilis incidence. In Hawaii, the use of internet to meet sexual partners has also increased. Among syphilis cases, sex for money or drugs is not a major contributing risk factor.

Gonorrhea among MSM: In 2001, a survey of 88 men who were diagnosed with gonorrhea at an STD clinic was asked about their risk factors. 31 (34%) responses indicated MSM. In 2003, using the same survey, 52 out of 140 (37%) was MSM.

Chlamydia among MSM: 29/316 (9.2%) surveyed was MSM.

Injection Drug Users (IDUs)

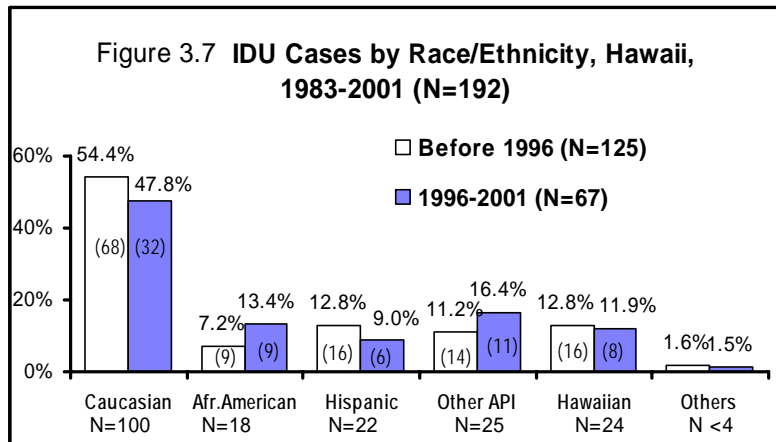
IDU is the second most frequent risk behavior for HIV/AIDS in Hawai'i. A total of 192 (7.2%) diagnoses of AIDS associated with this risk factor were made from 1983 through December 2001. IDU AIDS cases in Hawai'i comprise a much smaller percentage of total AIDS cases than is observed nationally. IDU AIDS cases account for 31% of the AIDS cases nationally from



July 1996-June 2000 (five years) and 8.9% (67/756) of Hawai'i's AIDS cases for 1996-2001. Figure 3.6 illustrates the gender ratio of AIDS cases among the IDU for the 1983-2001 time period. Thirty percent (30%) are female and 70% are male. This approximate proportion is observed in case data throughout the epidemic. A higher proportion of females AIDS cases was attributed to IDU (31%, 58/186 female cases) as compared to males (5%, 134/2,485 male cases). Drug injection is a more common route of HIV/AIDS transmission for females than for males.

Figure 3.7 illustrates IDU AIDS cases by Race/Ethnicity. Most of the IDU AIDS cases are among Caucasians (100, 52.1%), followed by Other APIs (25, 13%), Hispanics (22, 11.5%), Hawaiians (24, 12.5%) and African Americans (18, 9.4%). The proportion of IDU AIDS cases among

Caucasians has slightly decreased from 54.4% before 1996 to 47.8% in the recent six-year period. This downward trend is also seen among Hispanics and Hawaiians. The actual number of African American cases remained the same although the total proportion increased from 7.2% to 13.4%. The proportion of total IDU AIDS cases for other API groups has slightly increased from 11.2% to 16.4%.



Half of the cases were in the 35-44 age group. Table 3.3 illustrates the distribution of IDU cases by age group and indicates a trend towards a later age at diagnosis. Before 1996, 37.6% of these cases were diagnosed between 25 and 34, while from 1996-2001 only 17.9% were. The 45-54 age group showed an increased number and proportion in the 1996-2001 time period (8.8% vs. 28.4%).

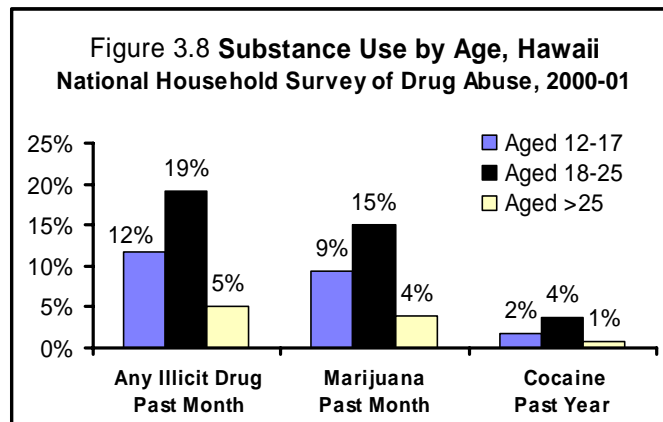
Table 3.3 Total IDU AIDS Cases by Age, Hawaii, 1983-2001

Age	Before 1996		1996-2001		Cumulative	
	No.	%	No.	%	No.	%
13-24	3	2.4%	2	3.0%	5	2.8%
25-34	47	37.6%	12	17.9%	59	32.6%
35-44	61	48.8%	33	49.3%	94	51.9%
45-54	11	8.8%	19	28.4%	30	16.6%
> 54	3	2.4%	1	1.5%	4	2.2%
Total	125	100%	67	100%	181	100%

Honolulu County accounted for 67% (45) of the IDU AIDS cases, followed by Hawaii County (15%, 10), Maui County (10%, 7), and Kauai County (8%, 5) in 1996-2001.

Injection or Other Substance Use

Estimates from the 2000-2001 National Household Survey of Drug Abuse suggest that among Hawai'i households, 7.5% of persons aged 12 years or older reported having used an illicit drug at least once in the previous month,--illicit drugs refer to marijuana/hashish, cocaine, inhalants, hallucinogens, heroin, or any other type of prescription psychotherapeutic drug used nonmedically. Those 25 and younger have a higher percentage of illicit drugs use than those over age 25. (Figure 3.8).



Source: the Substance Abuse and Mental Health Services Administration (SAMHSA)

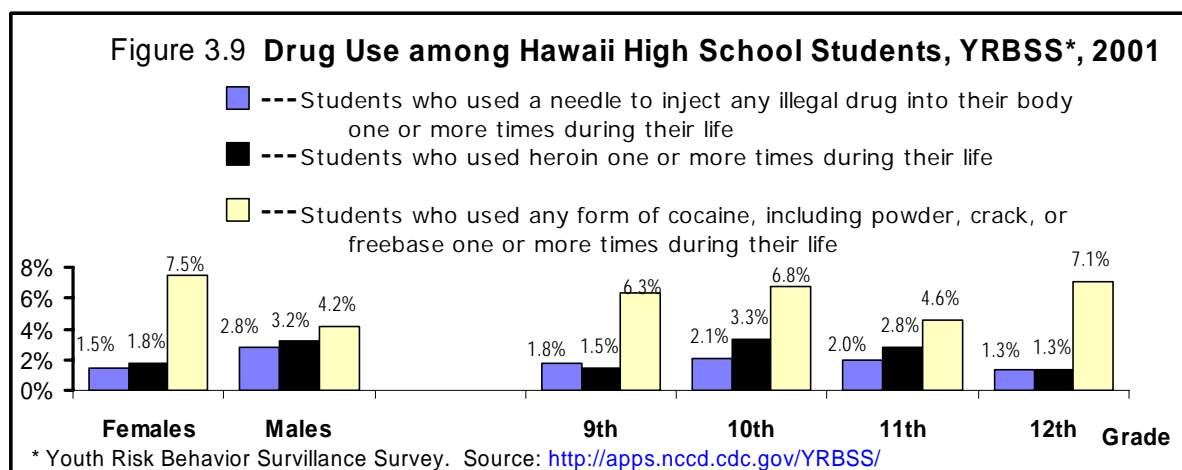
<http://www.oas.samhsa.gov/NHSDA/2k1State/vol1/appA.htm#taba.1>

The 2001 Youth Risk Behavior Surveillance Survey¹⁷ reported 20% of Hawai'i high school students surveyed as having used marijuana during the previous month, 6% ever used cocaine, and

¹⁷ http://www.cdc.gov/nccdphp/dash/yrbs/2001/summary_results/hawaii.htm

12% ever sniffed or inhaled intoxicating substances. Two percent of Hawai'i high school students reported that they used a needle to inject any illegal drug into their body one or more times during their life. More students used cocaine (6.1%) than heroin (2.5%).

Figure 3.9 provides additional information for drug use among high school students by gender and by grade. Use of injection drugs was higher among males (2.8%) than females (1.5%). Tenth grade students seem to report the highest percentage of any illegal injected drug use, as well as cocaine and heroin use during their lifetime (exception: cocaine use in 12th grade) among high school students. Beyond 10th grade, the percentages for drug use gradually dropped, possibly because students at highest risk are more likely to be absent from school or drop out. Thus, they are underrepresented in the upper grades. This is a limitation of YRBS because it is administered in school.



The 2002 Hawai'i Student Alcohol, Tobacco, and Other Drug Use Study (1987-2002) indicated lifetime prevalence reports of any illicit drug use (e.g., use of any illicit drug at least once in a person's lifetime), including inhalants. The proportion of usage was, 10% among 6th graders, 22% among 8th graders, 40% among 10th graders, and 49% among 12th graders in 2002. The lifetime prevalence of any illicit drug use steadily increased in 1993 and 1996, continued to increase at the upper grade levels in 1998, and finally decreased across all four grade levels in 2000¹⁸.

Data from the Treatment Episode Data Set (TEDS) provides additional information to indirectly measure injection drug use in Hawai'i. TEDS is based upon records of admissions. It does not represent individuals. There were a total of 6,456 substance abuse admissions in Hawai'i in 2002 (Table 3.4). That included 34.7% amphetamines usage, 22.2% marijuana usage, 4.2% cocaine smoked, 1.1% cocaine by other routes, 3.4% heroin and 2.6% others. Males were more likely than

¹⁸ **The 2002 Hawai'i Student Alcohol, Tobacco, and Other Drug Use Study, Hawai'i Adolescent Prevention and Treatment Needs Assessment** <http://www.state.hi.us/doh/resource/adad/report2002/2002executivesummary.pdf>
The State of Hawai'i Department of Health, Alcohol and Drug Abuse Division, and Dr. Renee Storm Pearson from the University of Hawai'i Speech Department collaborated in a study designed to assess prevalence and trends in substance use, treatment needs, and risk and protective factors that predict substance use and abuse among Hawai'i public and private school students statewide. The survey was administered anonymously to all 6th-, 8th-, 10th-, and 12th-grade students. The results presented in this report are based on the responses of 27,995 students from 181 public schools and 34 private schools.

females to be admitted for treatment. This gender difference was identified for all types of primary substances except “other” which included several types of drugs and accounted for less than 3 percent of the total of primary substances. Among those below age 18, the highest percentage of admissions was due to marijuana usage. Among persons aged 18-25 years, the highest percentage of admissions was due to use of amphetamines. Eleven percent of heroin admissions were among persons 18-25 years compared with 7.1% of admissions related to “other route” usage of cocaine.

Table 3.4 Substance Abuse Treatment Admissions by Primary Substance of Abuse, According to Sex and Age Group, Hawaii, 2002

		Primary Substance								
		Total	Amphet- amines	Mari- juana	Cocaine (smoked)	Cocaine (other route)	Heroin	Alcohol w/ secondary drug	Alcohol only	Other
Total	No.	6,456	2,240	1,432	268	70	217	1,131	931	160
	%	100	34.7	22.2	4.2	1.1	3.4	17.5	14.4	2.6
Sex										
Male	%	67.4	59.2	68.2	67.9	77.1	65.4	75	78.9	N/A
Female	%	32.6	40.8	31.8	32.1	22.9	34.6	25	21.1	N/A
Age at admission										
0-17 year	%	23.0	7.4	66.3	2.2	5.7	0.5	21.6	9.5	N/A
18-25 year	%	15.9	24.7	14.7	10.0	7.1	11.5	10.7	7.1	N/A
26-45 years	%	48.5	62.4	16.3	72.4	71.5	62.7	54	46.4	N/A
46 years and over	%	12.4	5.5	2.4	15.3	15.7	25.4	13.4	37.1	N/A
Unknown	%	0.1	0.1	0.3	0	0	0	0.3	0	N/A
Total	%	100	100	100	100	100	100	100	100	N/A

Source: Office of Applied Studies, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS).

http://www.dasis.samhsa.gov/web/tedsweb/tab_year.choose_year?t_state=HI

Hepatitis C is common (50%-90%) among HIV-infected injection drug users (IDUs)¹⁹. Hawai'i Surveillance programs currently does not collect co-infection data. The Hawai'i Seropositivity and Medical Management Program (HSPAMM) described in Chapter 4 does routinely test newly enrolled participants. The HSPAMM participant co-infection rate of HIV with Hepatitis C was 14%. (Detailed information is on the page 78).

Hawai'i Syringe Exchange Program Data

Needle sharing is an important risk factor for HIV infection among injection drug users. Hawai'i has a statewide needle exchange program which is helping to reduce the potential spread of HIV among injection drug users. The Hawai'i Syringe Exchange Program (SEP) reported that 1,011,194 syringes were exchanged through 33,569 client visits from 2000-2002 (Table 3.5). This resulted in an average of 43.1 syringes exchanged per visit. The data also show that the number of syringe exchanges and ratio of Hawai'i's IDU population who utilize the syringe exchange service may differ from those IDUs who do not use the SEP. A total of 288 persons were interviewed at random for the 2001 and 2002 SEP annual surveys, and their demographics are shown on Table 3.6. The proportion of females is approximately 38.7% of the total SEP participants. (AIDS Surveillance data: IDU female rate is 29.8%). Slightly more than half of those

¹⁹ http://www.cdc.gov/hiv/pubs/facts/HIV-HCV_Coinfection.htm

interviewed were Caucasian and approximately 10% were Hawaiian or part Hawaiian. The with a range of approximately 20 to middle 60's. According to the SEP2002 program evaluation survey, 15.5% of the subjects in the annual interviews reported that they had engaged in the risk behavior of using a needle and syringe that had been used by someone else. Approximately 31.7% reported that they passed on used needles and syringes to other drug injectors. More than 92% of persons interviewed reported having been tested for HIV (Table 3.7). Only 1 positive test in each survey year was reported. Six individuals (4.4%) of the 2001 respondents did not know their test results; nine individuals (6.9%) of the 2002 respondents did not know their tests results. 37% reported having a primary sexual partner. With that primary partner, 87% did not always use condoms. Eleven percent reported having casual sexual partners. With these partners, 47% did not always use condoms. Twenty-seven percent reported trading sex for money or drugs and 34% of these clients reported that they did not always use condoms.

Table 3.5 Syringe Exchange (SEP) Data

Year	Syringe Exchanges	Client Visits	Syringes /Visit
SEP2002	444,183	10,311	43.1
SEP2001	347,793	11,403	30.5
SEP2000	219,218	11,855	18.5
Total	1,011,194	33,569	30.1

Table 3.6 Characteristics of Participants in the Hawai'i Syringe Exchange Program, 2001 and 2002 Annual Surveys

Characteristic	Sep2001	Sep2002
	N = 146	N = 142
Gender	%	%
Male	62.0%	58.5%
Female	38.0%	39.4%
TG	0.0%	2.1%
Race/Ethnicity		
Caucasian	56.1%	52.1%
Hawaiian/Part Hawaiian	11.0%	9.9%
Other/mixed race	8.9%	9.9%
Asian ^a	8.2%	9.9%
Hispanic	4.8%	6.3%
Afr. American.	4.1%	5.6%
Native American	1.4%	2.8%
Filipino	4.8%	3.5%
Other Pacific Islander	0.7%	0.0%
Age		
Mean Age at Interview	41.8 yrs.	41.8 yrs.
Age Range	19-63 yrs.	21-66 yrs.
Mean Age at 1st Injection	22.9 yrs.	21.8 yrs.
Age Range	9-47 yrs.	10-47 yrs.

^a Excluding Hawaiians, Filipinos and Other Pacific Islanders. This is a different grouping than used elsewhere in this Epidemiologic Profile.

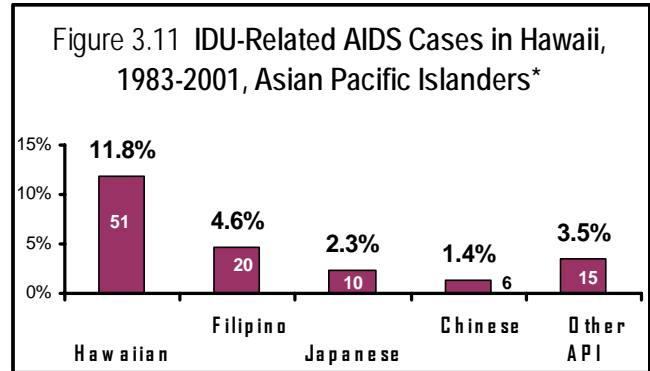
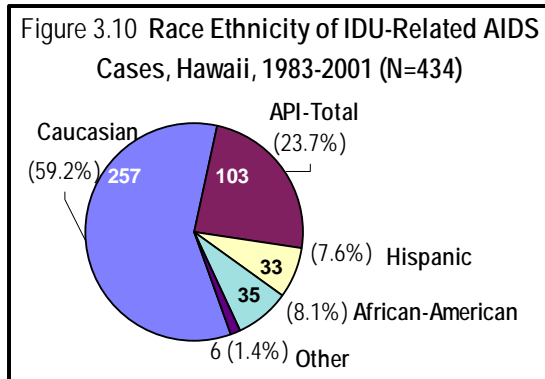
Table 3.7 HIV Self-Reported Testing Among SEP Clients

Status	Sep2001	Sep2002
HIV Tested	136/146 (93%)	130/142 (92%)
+ Test	1	1
- Test	129	120
Unknown	6 (4.4%)	9 (6.9%)

IDU - Related AIDS Cases

Through December 31, 2001, a cumulative total of 434 (16%) AIDS cases were associated with IDU as a risk factor, 77.8% (338/434) male and 28.3% (96/434) female. Of these, 44.2% (192 cases) were IDU, 41.7% (181 cases) were MSM/IDU, 12.7% (55 cases) were heterosexual exposure with IDU, 1.4% (6 cases) had an IDU mother or a mother who had sex with IDU.

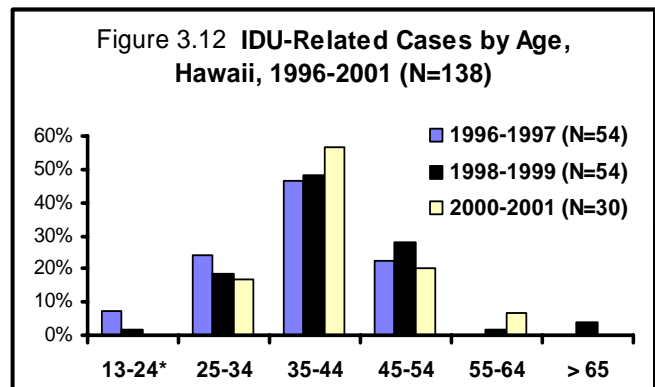
Figures 3.10 and 3.11 illustrate that more than half (257) of the IDU-related AIDS cases were Caucasian and almost one quarter were Asian/Pacific Islanders in the combined 1983-2001 tabulations. Almost 12% IDU-related AIDS were Hawaiian.



* % of total Hawai'i AIDS Cases

The largest proportion of cases was between the ages of 35 and 44 (49.3%) and the next largest between 45 and 54 (23.2%, Figure 3.12.)

Most IDU-related AIDS cases were diagnosed in Honolulu County (68%, 293) followed by 18.2% (79) Hawai'i County, 11.1% (48) Maui County and 3.2% (14) Kaa'i County.



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

Through December 2001, there were 181 AIDS cases reported with the dual risk factors of MSM/IDU.

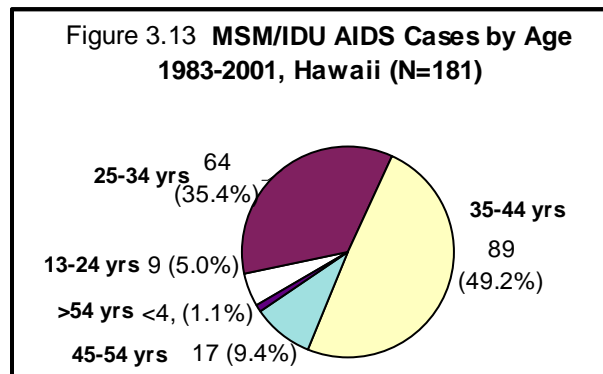
Table 3.8 details the number and proportion of MSM/IDU cases by race/ethnic groups. Most of the MSM/IDU cases

Table 3.8 MSM/IDU AIDS Cases by Race/Ethnicity, 1983-2001

Race/Ethnicity	Before 1996		1996-2001		Cumulative	
	No.	%	No.	%	No.	%
Caucasian	107	76.4%	28	68.3%	135	74.6%
Asian and PI	15	10.7%	8	19.5%	23	12.7%
Hawaiian/pt Hav	6	4.3%	5	12.2%	11	6.1%
Other API	9	6.4%	<4	-	12	6.6%
Hispanic	5	3.6%	<4	-	6	3.3%
African American	11	7.9%	<4	-	14	7.7%
Others	<4	-	<4	-	<4	-
Total	140	100%	41	100%	181	100%

(135 cases, 74.6%) are among Caucasians, followed by Asian and Pacific Islanders (23 cases, 12.7%). The proportion of MSM/IDU AIDS cases for Caucasians has decreased from 76% to 68% in the 1996-2001 time period as compared with the period before 1996. APIs are the second largest group of MSM/IDU and are increasing proportionately (10.7% to 19.5%). Much of this change is due to the increase in the proportion of Hawaiians.

Almost half of these cases (49.2 %, 89) were diagnosed among individuals between 35 and 44 of age (Figure 3.13). When comparing the time period before 1996 with the recent 1996-2001 time period (data not shown), there was an overall increase at the age of diagnosis for MSM/IDU AIDS in the current 6-year period. The proportion in the 45-54 age group increased from 7.1% to 17.1%



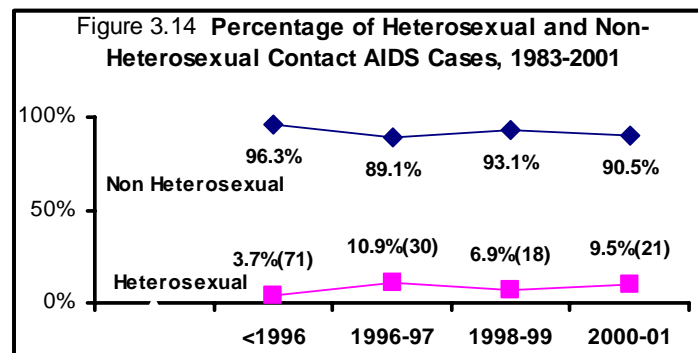
Honolulu County accounted for 71% (29) of total MSM/IDU AIDS cases, followed by Hawaii County (15%, 6) and Maui County (12%, 5) in 1996-2001.

Persons at Risk for HIV/AIDS through Heterosexual Contact

Heterosexual contact refers to persons whose only reported risk is heterosexual contact with a partner who is either HIV-infected, or known to be at high risk for HIV infection. Persons considered to be high-risk partners are bisexual men or injection drug users.

A total of 140 (5%) of all reported AIDS cases in Hawai'i through December 2001 are reportedly due to heterosexual contact. Among these 140 heterosexually-acquired cases, 69 (48%) were diagnosed in the recent six-year period, 1996-2001. National and local AIDS trends indicate that heterosexual transmission is becoming a more important risk factor.

Figure 3.14 compares the proportions of heterosexual contact and non-heterosexual contact for AIDS cases in different time periods. The percentage of AIDS cases transmitted through heterosexual contact more than doubled from 3.7% in 1983-1995 to 9.1% 1996-2001. Within the recent six-year period, cases decreased in 1998-1999 as compared with 1996-1997, and increased in 2000-2001.



Asians and Pacific Islanders (API) had the highest number (62, 44%) of cases with heterosexual exposure to HIV/AIDS. This includes Hawaiians 24 (17.1%), Filipinos (16, 11.4%) and other API (22, 15.7%) (Table 3.9). The number and proportion of Caucasian cases with heterosexual contact declined from 37 (52.1%) before 1996 to 24 (34.8%) in 1996-2001; among Hawaiians and other APIs (except Filipinos), the numbers increased in the 1996-2001 time period. The other racial/ethnic groups are too small to analyze further.

Table 3.9 Heterosexual AIDS Cases by Race/Ethnicity, 1983-2001

	1983-1995		1996-2001		Cumulative	
	No.	%	No.	%	No.	%
Caucasian	37	52.1%	24	34.8%	61	43.6%
Hawaiian/Pt Haw.	11	15.5%	13	18.8%	24	17.1%
Filipinos	10	14.1%	6	8.7%	16	11.4%
Other API	9	12.7%	13	18.8%	22	15.7%
Hispanic	<4	-	6	8.7%	7	5.0%
Afri. American	<4	-	5	7.2%	7	5.0%
Others	<4	-	<4	-	<4	-
Total	71	100%	69	100%	140	100%

Figure 3.15, which separates the heterosexual contact cases by gender, further illustrates the differences in proportion. A greater number and proportion (48, 54%) of female AIDS cases are attributed to heterosexual contact as compared with males (21, 3.1%).

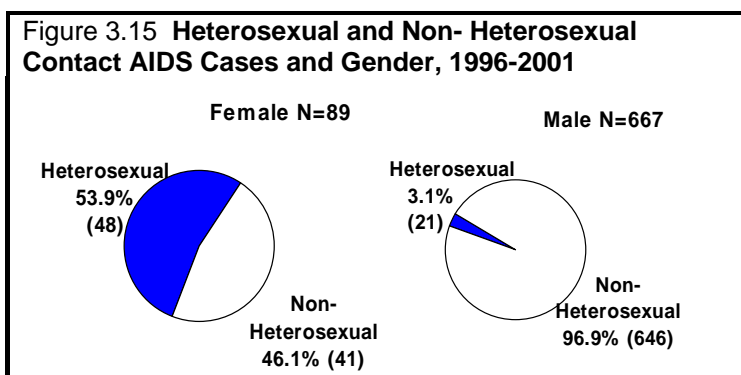


Table 3.10 compares all 1996-2001 male and female AIDS cases as they relate to heterosexual contact. Overall, more female cases (94) than male cases (46) are attributed to heterosexual contact. This gender difference was seen in all racial/ethnic groups, partner risk factors, and ages under 54. Among heterosexually-acquired AIDS cases, 54.3% of male and 36.2% of female infections may be attributed specifically to sex with an HIV-infected partner (including a partner whose own risk is unknown). It is unknown how many of these 59 cases were aware of their partner's risk for HIV infection and therefore may not have

Table 3.10 Heterosexually Acquired AIDS Cases, Hawaii, 1983-2001

Characteristic	Male		Female		Cumulative	
	No.	%	No.	%	No.	%
Race/Ethnicity						
Caucasian	24	52.2%	37	39.4%	61	43.6%
Asian and PI	16	34.8%	46	48.9%	62	44.3%
Hawaiian	6	13.0%	18	19.1%	24	17.1%
Filipino	<4	6.5%	13	13.8%	16	11.4%
Other API	7	15.2%	15	16.0%	22	15.7%
Others	6	13.0%	11	11.7%	17	12.1%
Age						
20-24	N/A		N/A		7	5.0%
25-34	19	41.3%	31	33.0%	50	35.7%
35-44	12	26.1%	38	40.4%	50	35.7%
45-54	8	17.4%	15	16.0%	23	16.4%
> 54	6	13.0%	4	4.3%	10	7.1%
Risk Category of Partner						
Sex with IDU	20	43.5%	35	37.2%	55	39.3%
Sex with bisexual male	--		17	18.1%	17	12.1%
Sex with a blood-product recipient	0		4	4.3%	4	2.9%
Sex with HIV+ partner with no specified risk	25	54.3%	34	36.2%	59	42.1%
Sex with hemophilia/coagulation disorder	N/A		N/A		5	3.6%
Total	46	100%	94	100%	140	100%

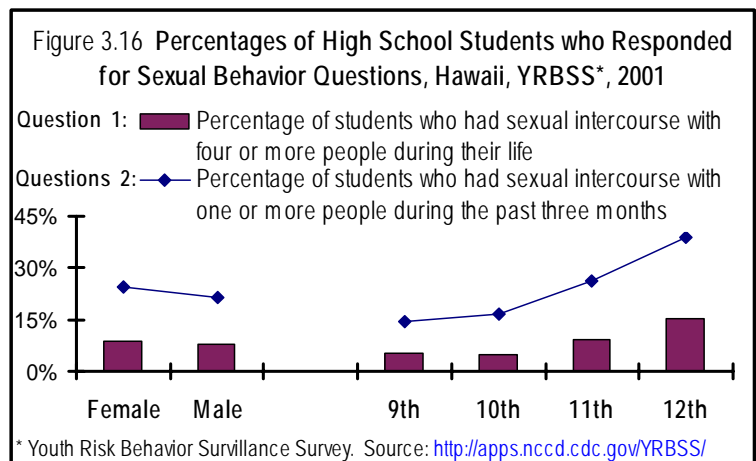
perceived themselves to be at risk Thirty nine percent of heterosexually transmitted AIDS cases involved sex with an IDU. Heterosexual contact with an HIV-infected (risk unknown) and an IDU partner were the main risk behaviors (81%) in heterosexual AIDS cases.

Almost 41% of heterosexually acquired AIDS cases were diagnosed before age 35. Heterosexual AIDS cases were diagnosed at an earlier age than AIDS cases with other modes of transmission (40.7% vs. 33.7%).

Honolulu County accounted for 64% (44) of the heterosexual contact AIDS cases, followed by Hawaii County (23%, 16) and Maui County (12%, 8) in 1996-2001.

Number of Sex Partners and Frequency of Condom Use or Unprotected Sex

The Hawai'i Youth Risk Behavior Surveillance Survey of high school students indicated that 8.4% of students had had sexual intercourse with four or more people during their life, 25% of students had had sexual intercourse with one or more people during the past three months. Figure 3.16 details those two questions by gender and by grade. Reports of 4 or more lifetime partners (Question 1) and 1 or more partners in past 3 months (Question 2) were slightly higher for female than male (8.7% vs. 7.7% in Question 1; 24.5% vs. 21.4% in Question 2). Overall, reports of 4 or more lifetime partners and 1 or more partners in the past 3 months increased with grade (age). Of those students who had sexual intercourse during the past three months, 21.6% drank alcohol or used drugs before the last intercourse and 54.5% did not use a condom during the last intercourse²⁰.



Indirect Measures of Risk Behavior

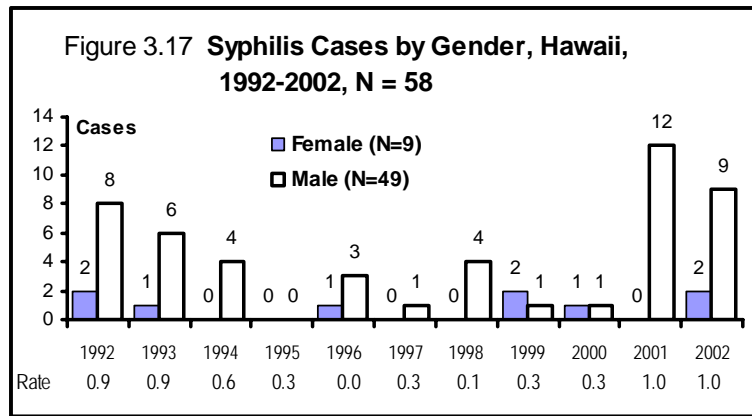
Sexually transmitted disease (syphilis, gonorrhea, and chlamydia) surveillance and teen pregnancy rates may provide information on potential high-risk heterosexual behaviors. However, increases in STDs or teen pregnancy rates may only indicate unsafe sexual practices that are not in themselves a risk factor for HIV infection-unless their partners are high risk.

²⁰ Source: CDC Youth Risk behavior Surveillance System Survey for Hawai'i, 2001
<http://apps.nccd.cdc.gov/YRBSS/ListV.asp?site1=HI>

Syphilis²¹

There were less than 5 early syphilis (primary, secondary and early latent syphilis) cases reported annually from 1997 to 1999 (Figure 3.17).

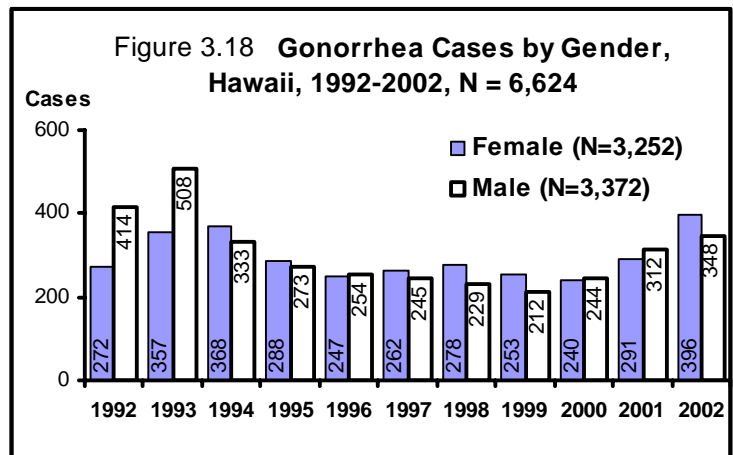
The cases were primarily among heterosexuals who acquired the infection out of state. Since 2000, there has been a resurgence of early syphilis acquired in Hawaii. The number of early syphilis cases increased from 7 early syphilis cases in 2000 to 20 in 2003. However, majority of the infections have been identified among MSM. (Table 3.2 on page 33).



*Figure shows primary and secondary cases only. Rate: cases/ per 100,000.

Gonorrhea

The gonorrhea incidence rate decreased from 465 gonorrhea cases per 100,000 population in 1977 to 40 gonorrhea cases per 100,000 population in 2000. Since then, the gonorrhea incidence rate has increased to 49.1 per 100,000 population in 2001, and continued to increase to 59.8 and 101.5 per 100,000 population in 2002, and 2003, respectively (Figure 3.18). The 2003 gonorrhea incidence rate reflects a 67% increase in gonorrhea cases. Over half the gonorrhea cases (1,714, 55.9%) between 1996 and 2001 were diagnosed in individuals aged 15-24, yielding an average annual rate of 173 cases per 100,000 for this age-group. This average annual rate among those aged 15-24 years old is at least 3 times greater as compared to those aged 25-44 years (54 per 100,000). As described by Katz, *et al*²², because many young adults are not sexually active, population based data may not accurately measure the incidence of gonorrhea among these age groups. Data from the Gonorrhea Screening Program supports that younger age groups have greater gonorrhea positivity rate and the positivity rate



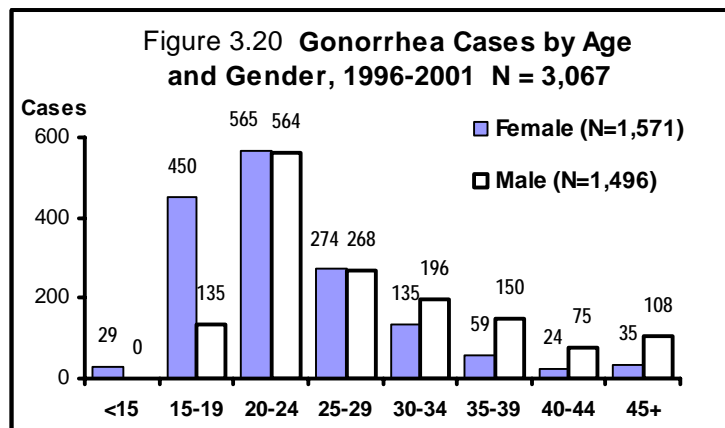
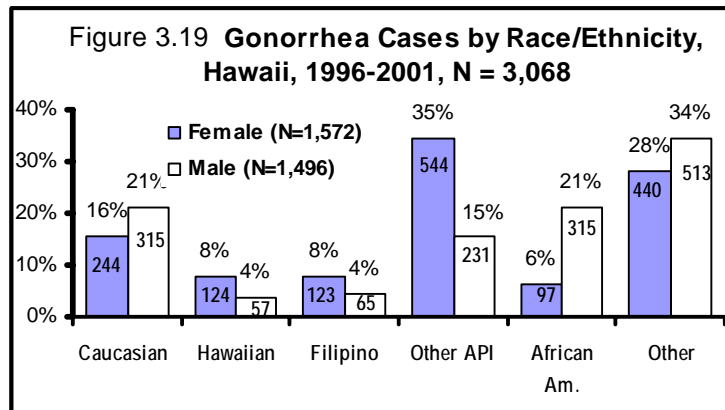
Rate: cases/ per 100,000 population.

²¹Source: Syphilis, gonorrhea and Chlamydia data from STD/AIDS Prevention Program, Department of Health

²² Katz AR, Effler PV, Ohye RG, Lee MV. Assessing Age-related Risk for Gonococcal and Chlamydia infections among females in Hawaii, 2001: A comparison of morbidity rates with screening test positivity. *Ambulatory pediatrics* March-April, 2004;4:188-191.

incrementally decreases with age. Most female gonorrhea was diagnosed in API (51%, including Hawaiian and Filipino) and Caucasian (16%) females (Figure 3.19). Most male gonorrhea was diagnosed in Caucasians (21%) and African Americans (21%). Unknowns are included in “Other”.

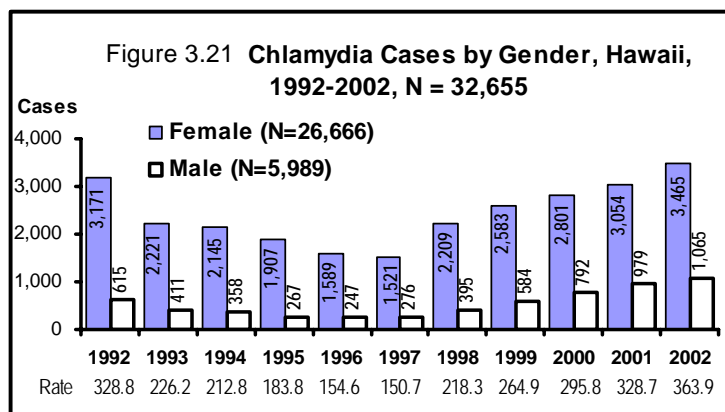
Sixty-five percent of all gonorrhea cases were diagnosed in females between the ages of 15 and 24; only 46.7% cases were diagnosed in males in the same age group (Figure 3.20). Males continue to be infected with gonorrhea through their 30s and 40s and represent 35% of cases, but women of the same ages represent only 16% of cases.



Chlamydia

Chlamydia has been a reportable disease in Hawai'i since May 1990 and has become the most prevalent of all sexually transmitted diseases. This infection can be specially problematic in women, since it is often asymptomatic. If left untreated, Chlamydial infection may progress to pelvic inflammatory disease, ectopic pregnancies, and/or infertility. In addition, pregnant women who are infected with Chlamydia may pass this infection to their babies during delivery.

The Chlamydia incidence rate for 1992 was 328.8 cases per 100,000 (Figure 3.21). It declined annually until 1997 when it reached a low Chlamydia incidence rate of 150.7 cases per 100,000. Then, in 1998, the Chlamydia incidence rate increased to 218.3 per 100,000 population. The increase may be in part due to the availability of a more sensitive laboratory test for Chlamydia. Incidence of Chlamydia has continued to increase annually.



Rate: cases/ per 100,000 population.

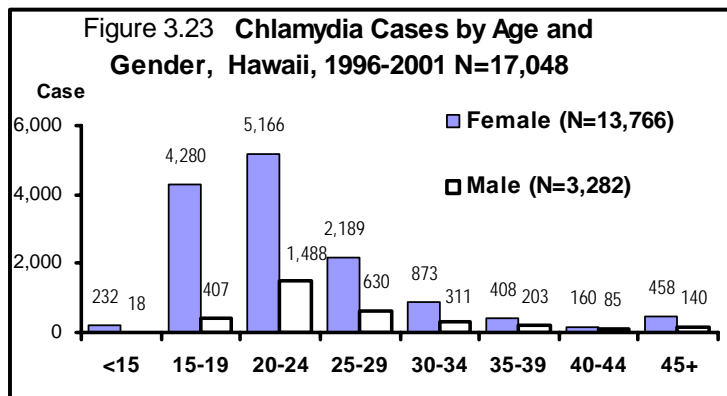
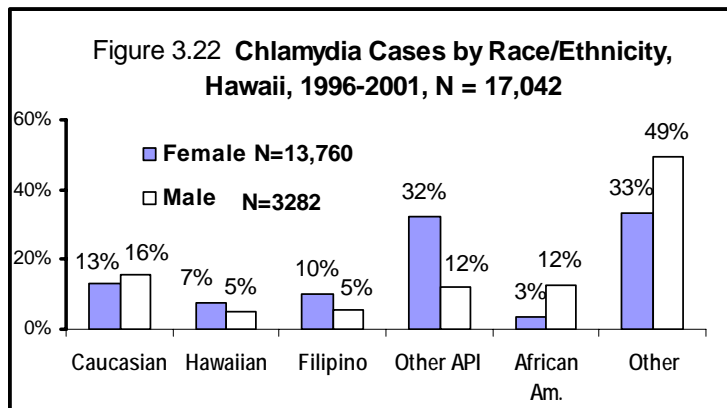
As more sensitive laboratory tests are developed and become commercially available, the number of Chlamydia infections detected will also increase. However, the introduction of more sensitive Chlamydia test alone can not account for the annual increases of Chlamydia cases in Hawaii. Chlamydia incidence rate was 264.9 per 100,000 in 1999 and continued to rise to 446.9 per 100,000 population in 2003.

At present, except for those presenting the at the public STD clinic, there is no Chlamydia screening program specifically for males. The Chlamydia Screening Program provides Chlamydia screening primarily to women participating in the Family Planning Program and their partners. Hence, the data largely reflects the incidence of Chlamydia infection among females (26,666 female cases vs. 5,989 male cases). Only 18.3% of all Chlamydia cases were diagnosed in males between 1992 and 2002. Increased availability of urine testing may increase the number of men being tested for Chlamydia.²³ The number of cases continues to increase, in part, as awareness and ease of diagnosis continues to improve.

Figure 3.22 Chlamydia by Gender and by Race/Ethnicity indicates that 32% of female cases were Asian/Pacific Islanders - we have local race data and ethnicity (i.e. Hispanic/non-Hispanic). A large number of STD cases (33% female, 49% male) have unknown race/ethnicity and are classified as “other”. Most male patients diagnosed with Chlamydia were Caucasians (16%) and African Americans (12%).

Figure 3.23 shows Hawai'i Chlamydia cases by different age groups. Young adults aged 15-24 years old continue to account for about 2/3 of the Chlamydia cases reported yielding an average of 1,150 annual cases per 100,000. This average annual rate among those aged 15-24 is 5 times as high as the rate among those aged 25-44 (224 per100,000). Moreover, although the chlamydia rate among aged 10-14 for female was low, this group had the highest screening test positivity (7.4%)²².

The majority of Chlamydia cases for females occurred between 15 and 24 years (55.4%). For males, the majority of Chlamydia cases were between 20 and 29 years of age (64.5%).



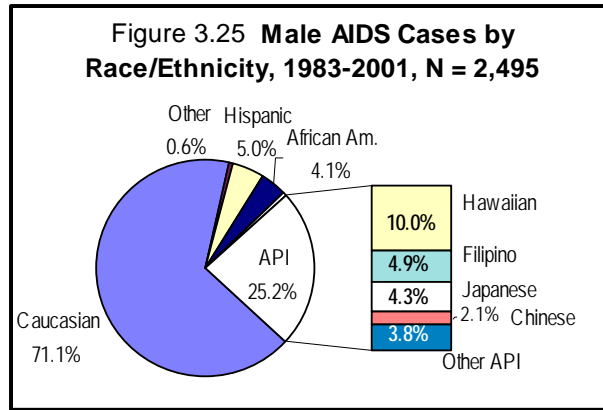
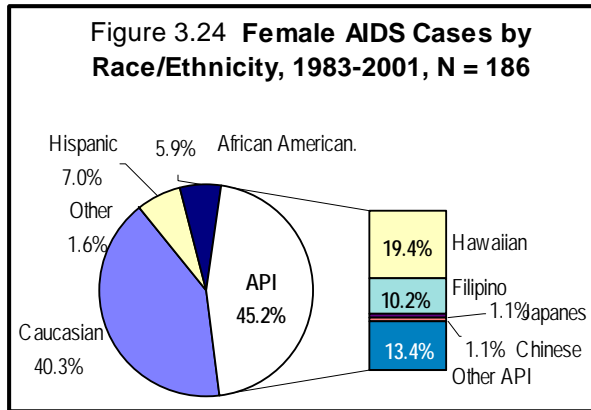
²³ Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance, 2002*. Atlanta, GA: US Department of Health and Human Services, September 2003.

Pregnancy Rate for Teenagers

The Hawai'i teenage pregnancy rate in 2000 was 93 per 1,000 women aged 15–19, which ranked 12th highest nationwide and was above the national average of 84 per 1,000 women aged 15–19. The teenage pregnancy rate for African Americans (143) was similar to the rate for Hispanics and over twice as high as the rate (56) for white teenagers.

HIV/AIDS in Women and Children

From 1983 to December 31, 2001, 186 females with AIDS have been diagnosed in Hawai'i. Almost half (45%) of the total female AIDS cases are API. Caucasian and Hawaiian women represented 40.3% (75) and 19.4% (36), respectfully, of female AIDS cases (Figure 3.24 and Table 3.11). Higher proportions of female cases were among API (45% vs. 25%), Hawaiians and Filipinos than male cases (Figure 3.25). More male cases than female cases are seen in all



race/ethnicity categories. Comparing 1996-2001 with the years before 1996, shows the proportion of female African American and Hawaiian cases have increased, Caucasian, combined API, and Filipinos have declined while Hispanic proportions have not changed.

A total of 89 (48%) females were diagnosed in 1996-2001. The proportion of total AIDS cases that are female increased from 5.0% (97 cases) in 1983-1995 to 11.8% (89 cases) in 1996-2001 though the actual numbers slightly decreased.

Figure 3.26 illustrates that heterosexual contact and IDU are the major risk factors for females. For over half of these female cases, the most commonly reported risk behavior was heterosexual contact. The next most commonly reported risk factor was the women's own injection drug use (31.2%, 58 cases). Figure 3.26 also shows the risk from the woman's partner: 34 (18.3%) had an HIV positive partner, 35 (18.8%) had partners who were injecting drug users, 17 (9.1%) had partners who were bisexual male and 8 (4.3%) had partners with other risks.

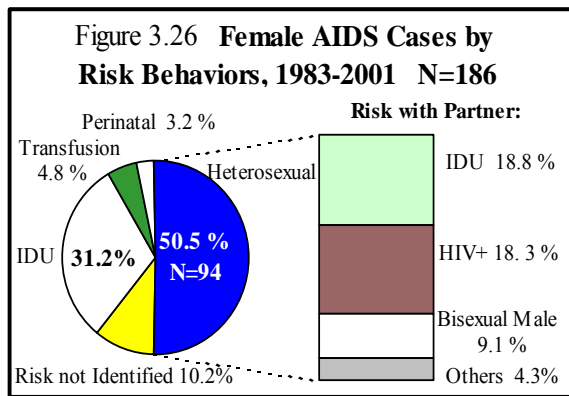
Women were diagnosed with AIDS at younger ages than men. Figure 3.27 compares the percent distribution of AIDS cases by age at diagnosis by gender. During

Table 3.11 Male and Female AIDS Cases by Race/Ethnicity, Hawaii, 1983-2001

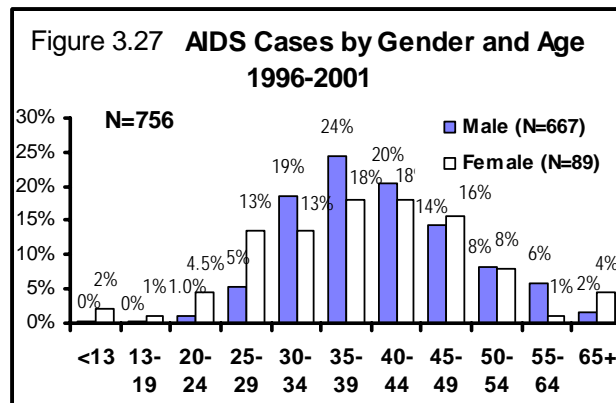
	Before 96		1996-2001		Cumulative Total	
	No.	%	No.	%	No.	%
Male						
Caucasian	1,226	67.1%	399	59.8%	1,625	65.1%
Asian and PI	433	23.7%	195	29.2%	628	25.2%
Hawaiian	172	9.4%	77	11.5%	249	10.0%
Filipino	81	4.4%	41	6.1%	122	4.9%
Japanese	79	4.3%	29	4.3%	108	4.3%
Chinese	38	2.1%	15	2.2%	53	2.1%
Other API	63	3.4%	33	4.9%	96	3.8%
Hispanic	88	4.8%	37	5.5%	125	5.0%
African Am.	74	4.0%	29	4.3%	103	4.1%
Other (Ind.)	7	0.4%	7	1.0%	14	0.6%
Total	1,828	100%	667	100%	2,495	100%

	Before 96		1996-2001		Cumulative Total	
	No.	%	No.	%	No.	%
Female						
Caucasian	40	41.2%	35	39.3%	75	40.3%
Asian and PI	45	46.4%	39	43.8%	84	45.2%
Hawaiian	18	18.6%	18	20.2%	36	19.4%
Filipino	11	11.3%	8	9.0%	19	10.2%
Japanese	0	0.0%	2	2.2%	2	1.1%
Chinese	0	0.0%	2	2.2%	2	1.1%
Other API	16	16.5%	9	10.1%	25	13.4%
Hispanic	7	7.2%	6	6.7%	13	7.0%
African Am.	3	3.1%	8	9.0%	11	5.9%
Other (Ind.)	2	2.1%	1	1.1%	3	1.6%
Total	97	100%	89	100%	186	100%

* All groups are shown as percent of total AIDS cases of the same sex.



*This figure is shown as percent of total female cases.



the 6-year period 1996-2001, a greater proportion of females received their AIDS diagnosis at ages 20-29 years as compared to males (18% vs. 6%); a lesser proportion of females received their diagnoses at ages 30-39 years as compared to males (31% vs. 43%). It is important to recognize that the age at AIDS diagnosis is not the age when HIV infection was acquired. The differences in age at diagnosis between males and females become clearer when the percentages of cases for

those age groups are compared rather than the numbers. The actual number of male cases is much higher than female cases for most age groups.

Honolulu County had 58 (65%) female AIDS cases, Hawaii County (20, 23%), Maui County (8, 9%) and Kauai County (<4, 3%) in 1996-2001.

Hawai'i has been fortunate to have had very few children diagnosed with AIDS. Of 16 pediatric cases (12 years and younger) diagnosed among Hawai'i residents from 1986 through 2001, 10 were male (62.5%) and 6 were female (37.5%). Risk for pediatric AIDS cases were as follows: 13/16 (81.3%) were attributed to perinatal exposure whereby HIV was transmitted from mother to child either during gestation or while giving birth; pediatric hemophilia <4; and contaminated blood products <4. There was a statewide average of less than one perinatal case per year. No new cases were diagnosed in 2001.

Hawai'i Pregnancy Risk Assessment Monitoring System (PRAMS)²⁴

Hawai'i PRAMS is part of the Centers for Disease Control and Prevention (CDC) initiative to reduce infant mortality and low birth weight. PRAMS is an ongoing, population-based risk factor surveillance system designed to identify and monitor selected maternal experiences and behaviors that occur before and during pregnancy and during the child's early infancy, by using a stratified sample of mothers delivering a live birth. Few of the sampled mothers would be HIV-positive or even at high risk for HIV infection, therefore, the data are not likely to be representative of their particular risk factors.

PRAMS survey data combining 2000-2001 (Table 3.12) showed that in Hawai'i, 6.7% of women used illegal drugs one month before pregnancy; 20.5% of women smoked and 41.8%

Table 3.12 **Substance Use, Pregnant Women by Race/Ethnicity, PRAMS, Hawaii, 2000-2001**

	Before Pregnancy			During Pregnancy		
	1 mo. Drug Use ^a	3 mo. Smoking	3 mo. Drinking	Throughout Drug Use ^a	Last 3 mo. Smoking	Last 3 mo. Drinking
Chinese & Japanese	3.2%	13.2%	41.8%	1.5%	3.4%	2.8%
Filipino	4.9%	15.1%	26.1%	1.8%	7.2%	2.0%
Hawaiian	9.7%	29.8%	44.4%	4.2%	15.3%	3.8%
Other API	5.0%	22.0%	25.8%	3.0%	9.8%	3.4%
Other Non-White	4.7%	14.9%	52.8%	4.9%	7.9%	9.4%
White	8.2%	20.1%	58.1%	3.8%	7.1%	9.1%
Total Population	6.7%	20.5%	41.8%	3.1%	9.0%	4.7%

^a Illegal Drug Use

Source: Special data request from Hawaii PRAMS Project, May 2004

²⁴ Source: Hawai'i Department of Health, Maternal and Child Health Branch. Hawai'i state-resident women who have given birth to a live-born infant are eligible for the PRAMS sample. Mothers who did not seek prenatal care will not have information on prenatal HIV counseling. PRAMS data rely on self-reported information; thus, the information is subject to recall bias. Additional background and information are available at:

<http://www.eastwestqigong.org/prams3.html>

consumed alcohol three months before pregnancy. The highest percentages of illegal drug use (9.7%) and smoking (29.8%) were among Hawaiians. White females had the highest percentage of alcohol consumption (58.1%) and the second highest illegal drug use (8.2%). During pregnancy, 3.1% of the combined sample of women used illegal drugs. During the last three months of pregnancy, 9% of women smoked and 4.7% of women consumed alcohol. Comparing pre-pregnancy usage with pregnancy usage in the total population sampled, the percentages of the three substances used decreased by more than half. Alcohol consumption decreased by almost 90%. Three to six months after the birth, the percentage of women smoking increased from 9.0% to 14.3%. It is not known what percentages of women used illegal drugs and consumed alcohol after the birth.

HIV Seroprevalence in Childbearing Women

From the second quarter 1997 through 2002²⁵, 106,149 HIV tests were performed on pregnant women as part of routine prenatal screening. Fifteen tests were positive for a rate of 19.8 per 100,000 tests. Three tests per year were positive for the years 2000, 2001, and 2002. It is not known if these positive tests represent the first HIV+ test for these women or even the first pregnancy with a positive HIV status.

Transgender (TG) at Risk

There are few data on transgender at risk in Hawaii. Hawaii uses the CDC model for its state AIDS surveillance system. This system includes only two gender classifications—male and female. While the state's HIV reporting system does include transgender in its gender classifications, HIV reporting data are not available at this time.

The Hawaii State Department of Health added male-to-female transgender and female-to-male transgender to its HIV counseling and testing gender categories in mid-2001. Out of a total of 8,550 publicly funded HIV antibody tests administered statewide, 122 HIV antibody tests were administered to transgenders at risk. There were fewer than 4 positive results for 2002.

Health Education/Risk Reduction (HERR) prevention interventions were delivered to TGs at risk in 2002. Results from these interventions are presented in an Appendix.

The HIV Seropositivity and Medical Management Program (HSPAMM) began to collect data for male-to-female transgender and female-to-male transgender clients in mid-2003. These data are too recent to be made available for inclusion in this Epidemiologic Profile.

HIV/AIDS in Adolescents/Young Adults

Through 2001, there were ten AIDS cases among adolescents (13-19 years old) and 64 cases among young adults (20-24 years old) in Hawai'i. These represent 0.4 % and 2.4 % respectively,

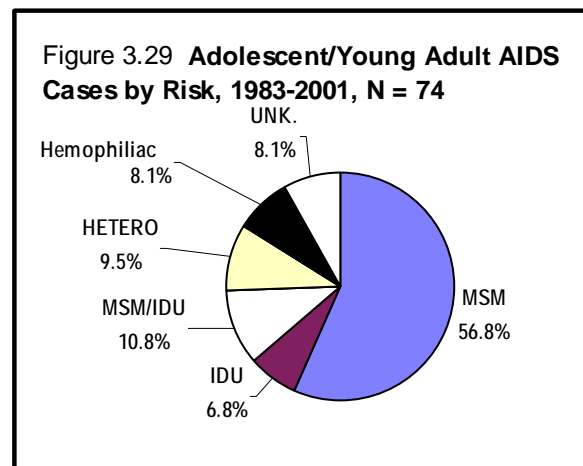
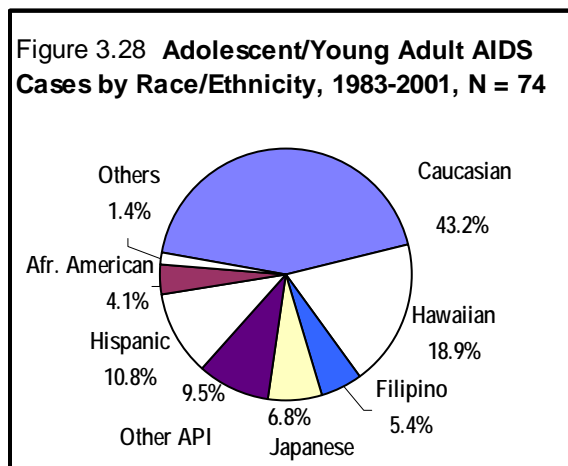
²⁵ Source: Hawaii AIDS Education Project. 1997 data is from final 3 quarters of the year.

of total AIDS cases. Less than four adolescent AIDS cases and 16.9% (11) of the young adult AIDS cases occurred in 1996-2001.

Although the number of adolescents with AIDS is relatively small, it is likely that many young adults who are currently HIV-infected have not yet developed AIDS. It may take a number of years to go from HIV infection to the development of AIDS. Within the 35 states with HIV reporting, 4% of AIDS cases and 18% of HIV-positive cases (not yet diagnosed with AIDS) were adolescents and young adults age 13-24 at initial diagnosis.²⁶

For Hawai'i's adolescent AIDS cases, 9 out of 10 cases (90%) were Asians and Pacific Islanders. For young adult AIDS cases ages 20-24, 48.4% (31) were Caucasian, 12.5% (8) were Hispanic, 36.0% (23) were API, including 17.2% (11) Hawaiian and part-Hawaiian (data not shown).

There are 63 male and 11 female cases in the combined 13-24 age group diagnosed with AIDS through 2001. AIDS cases by race/ethnicity for this age group are shown in Figure 3.28. Almost half (5/11, 45.4%) of the young women were diagnosed in the 1996-2001 time period. Only one eighth (8/63, 12.7%) of the young men were diagnosed in this same time period. Figure 3.29 shows adolescent and young adult AIDS cases by risk. Two out of three of the cases had been infected with HIV by the following risk factors, MSM (42, 56.8%), or MSM/IDU (8, 10.8%), follow by heterosexual contact (7, 9.5%), hemophilia (6, 8.1%) and IDU (5, 6.8%).



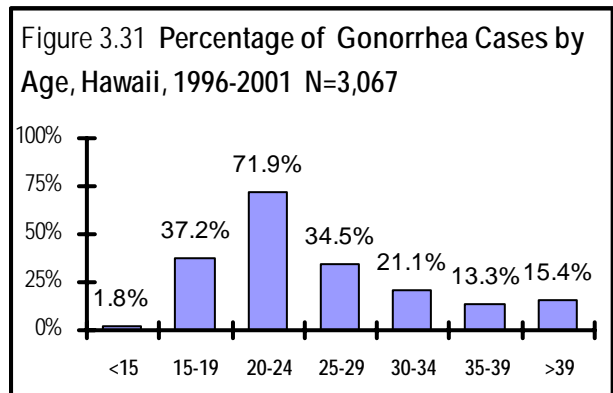
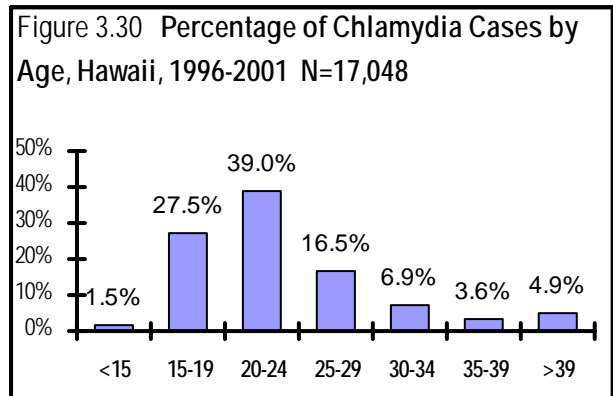
The 2001 Hawai'i Youth Risk Behavior Surveillance survey indicated that 71.7% of high school students had been taught about HIV in school. One third (33.6%) of the students had engaged in sexual intercourse and 8.4% had had four or more partners. Nine percent had been forced to have sexual intercourse. Of those who were sexually active, 54% did not use a condom during their last sexual intercourse and 83% did not use birth control pills. A total of 3.5% had been pregnant or had gotten someone pregnant one or more times. Unlike the national statistics, Hawai'i results showed that the female students engage in these high risk sexual behaviors slightly more often than

²⁶ CDC. HIV/AIDS Surveillance Report, Table 7. AIDS cases by sex, age at diagnosis, and race/ethnicity, reported through June 2001, United States. Table 8. HIV infection cases by sex, age at diagnosis, and race/ethnicity, reported through June 2000, from the 36 areas with confidential HIV infection reporting. Midyear Edition, Vol 13, No 1, p 14-15. www.cdc.gov/hiv/stas/harslink.htm.

their male counterparts. However, slightly more males were reported to contribute to the 21% average reported among those drinking alcohol or taking drugs before their last sexual intercourse. Male high-risk sexual behaviors should be interpreted with caution as relatively few (less than 100) of the high school students indicated participating in such behaviors.

A review of Hawai'i birth data indicated 11.4% of all births between 1996 and 2001 were to young women under the age of 20 and 24.4% were to young women 20-24. One quarter of all births in the State of Hawai'i are to unmarried women, (requested data-Department of Health Vital Statistics Branch).

Figures 3.30 and 3.31 illustrate the proportions of reported cases of Chlamydia and gonorrhea by age groups. These graphs show that a substantial number and percentage of the cases are among teenagers and young adults. As with any inflammatory infections, STD can facilitate the transmission of HIV placing these young men and women at increased risk for HIV transmission.



HIV/AIDS in Caucasians

Caucasians account for 63.4 % (1,700/2681) of total AIDS cases through 2001. They represent the largest number and proportion of AIDS cases for any race in Hawai'i. The AIDS cases among Caucasians increased from 144 cases in 1996-1997 to 166 cases in 1998-1999, and then declined to 124 cases in 2000-2001 (Figure 3.32). Overall, the number of AIDS cases among Caucasians has decreased. The percentage has dropped from 65.8% before 1996 to 56.1% in 2000-2001. Caucasians comprise approximately 31.4% of the Hawai'i population (US Census 2000, redistributed). In 2000-2001, the AIDS rate for Caucasians was 32.6 per 100,000 population, which is higher than state average (18.2).

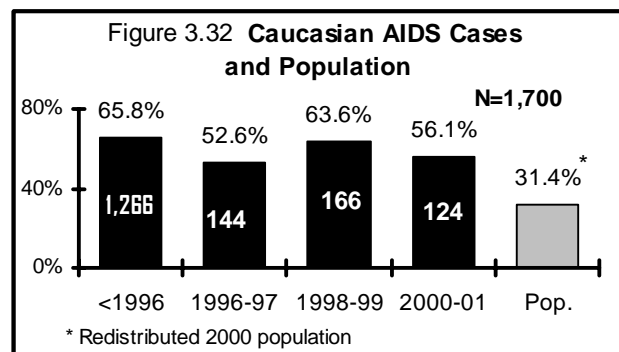


Table 3.13 illustrates the demographics of Caucasian AIDS cases. While males accounted for most of the cases, their relative numbers have decreased from 1996-1997 (135) to the current 2000-2001 time period (113).

MSM continues to be the primary risk factor (1322/1700, 77.8%) for Caucasians, but this also has gradually decreased for the 2000-2001 time period from 80.5% to 66.1%. “Unknown” as a risk factor has greatly increased. The proportion of cases with a heterosexual risk has tripled. This is consistent with nationwide trends.

Caucasian AIDS cases are being diagnosed at an older age. In the 1983-1995 time period 73% of cases were between 25 and 44, while 61% were in 2000-2001. The proportion of cases for aged 45 and over increased from 25% in the 1983-1995 to 37% in the 2000-2001.

Almost sixty-six percent (65.8%) of the Caucasian population resides in Honolulu and 66% of Caucasian cases are from Honolulu. Maui and Hawai'i each have approximately 14% of the Caucasian cases as well as 14% of the total Caucasian population.

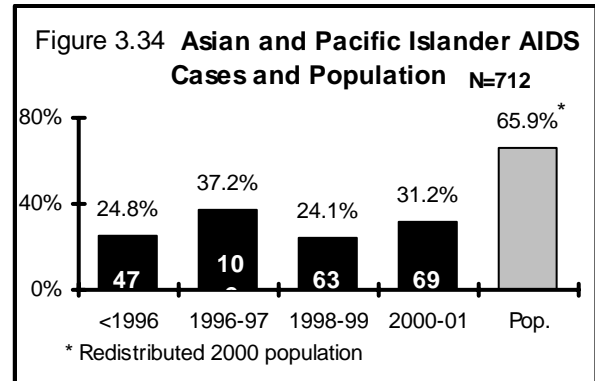
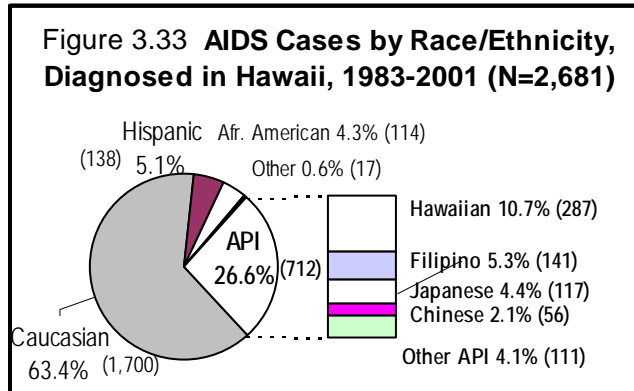
Table 3.13 **Caucasian AIDS Cases, 1983-2001**

Characteristic	<1996		1996-97		1998-99		2000-01		Cumulative	
	No.	%	No.	%	No.	%	No.	%	No.	%
Sex										
Male	1,226	96.8%	135	93.8%	151	91.0%	113	91.1%	1,625	95.6%
Female	40	3.2%	9	6.3%	15	9.0%	11	8.9%	75	4.4%
Exposure Category										
MSM	1,019	80.5%	105	72.9%	116	69.9%	82	66.1%	1,322	77.8%
IDU	68	5.4%	9	6.3%	19	11.4%	4	3.2%	100	5.9%
MSM/IDU	107	8.5%	11	7.6%	13	7.8%	4	3.2%	135	7.9%
Heterosexual	37	2.9%	9	6.3%	5	3.0%	11	8.9%	62	3.6%
Unknown	17	1.3%	8	5.6%	11	6.6%	21	16.9%	57	3.4%
Other	18	1.4%	<4	-	<4	-	<4	-	24	1.4%
Age										
<25	30	2.4%	<4	1.4%	<4	1.2%	<4	1.6%	36	2.1%
25-34	397	31.4%	37	25.7%	29	17.5%	23	18.5%	486	28.6%
35-44	526	41.5%	62	43.1%	78	47.0%	53	42.7%	719	42.3%
45-54	231	18.2%	37	25.7%	47	28.3%	31	25.0%	346	20.4%
>54	82	6.5%	6	4.2%	10	6.0%	15	12.1%	113	6.6%
County										
Honolulu	862	68.1%	94	65.3%	91	54.8%	79	63.7%	1,126	66.2%
Hawaii	197	15.6%	21	14.6%	27	16.3%	15	12.1%	260	15.3%
Maui	139	11.0%	20	13.9%	34	20.5%	24	19.4%	217	12.8%
Kauai	68	5.4%	9	6.3%	14	8.4%	6	4.8%	97	5.7%
Total	1,266	100%	144	100%	166	100%	124	100%	1,700	100%

HIV/AIDS in Asian and Pacific Islander Ethnic Groups

Asian and Pacific Islanders represent 26.6 % (712/2,681) of the total diagnosed AIDS cases as of December 31, 2001 (Figure 3.33). Asian and Pacific Islanders have the second largest proportion

and numbers of AIDS cases in Hawai'i. Hawaiian and Part-Hawaiians²⁷, Filipinos, Chinese, and Japanese account for most cases of AIDS in Hawai'i among Asian and Pacific Islanders. "Other Asian Pacific Islander" is the designation used for those individuals who come from any other Asian or Pacific Island background and include such small numbers (<5) that



they must be grouped together for any meaningful analysis. "Other API" cases include cases among Korean, Samoan, Guamanian, Marshallese, Palauan, Vietnamese, and Laotian population groups. Asian and Pacific Islanders comprise approximately 65.9% of Hawai'i's population. (US Census 2000 redistribution).

Diagnosed AIDS cases among Asian and Pacific Islanders decreased 38% from 102 cases in 1996-1997 to 63 in 1998-1999, then increased slightly to 69 cases in 2000-2001 (Figure 3.34). Overall, the proportion of API AIDS cases increased over time. Asian/Pacific Islanders have the highest proportion of female AIDS cases among any race/ethnicity, 17% in 1996-2001.

The rate for combined API for 2000-2001 was 8.6 per 100,000 population, which is less than half of the state average AIDS case rate (18.2) and approximately one quarter of the Caucasian rate (32.6) and African American rate (38.7).

Table 3.14 illustrates the demographics of the Asian and Pacific Islander AIDS cases. While most API AIDS cases are male (628/712, 88%), the proportion of female API AIDS increased (9% to 16%). Male and female AIDS cases among API increased from 1998-1999 to 2000-2001. The number of AIDS cases among Hawaiians and Filipinos increased in 2000-2001 from 1998-1999. These increases were similar to the 1996-1997 figures. The relative number of Japanese cases remained the same between 1998-1999 and 2000-2001 (8 cases) and represented a decrease from 1996-1997.

More heterosexual cases were diagnosed in the 1996-2001 six-year period than in the previous twelve years before 1996 (33 vs. 30) and the proportion was more than doubled (14.1% vs. 6.3%). Conversely, less than half the MSM cases were diagnosed during (1996-2001) time period than in the preceding twelve years (371 to 149) and the proportion decreased from 77% to 64%. Most female AIDS cases have heterosexual contact as their risk factor.

²⁷ See Introduction-Profile Preparation (page 5) for more detailed information.

Overall, the age at diagnosis for API AIDS cases had increased. For example: among aged 45-64, the proportion cases increased from 16.7% before 1996 to 28.9% in 2000-2001.

Maui County has had an increase in the proportion of API cases (5% in before 1996 to 15.9% in 2000-2001), while the actual number was almost the same for the current six-year period as for the twelve years preceding. Honolulu County has had a decrease in the proportion of new API AIDS cases, from 82% in before 1996 to 68% in 2000-2001.

Table 3.14 Asian Pacific Islander AIDS Cases, 1983-2001

Characteristic	<1996		1996-97		1998-99		2000-01		Cumulative	
	No.	%	No.	%	No.	%	No.	%	No.	%
Sex										
Male	433	90.6%	83	81.4%	54	85.7%	58	84.1%	628	88.2%
Female	45	9.4%	19	18.6%	9	14.3%	11	15.9%	84	11.8%
Ethnic Group										
Hawaiian	190	39.7%	40	39.2%	21	33.3%	36	52.2%	287	40.3%
Filipino	92	19.2%	19	18.6%	12	19.0%	18	26.1%	141	19.8%
Japanese	86	18.0%	15	14.7%	8	12.7%	8	11.6%	117	16.4%
Chinese	39	8.2%	10	9.8%	4	6.3%	<4	-	56	7.9%
Other API	71	14.9%	18	17.6%	18	28.6%	4	5.8%	111	15.6%
Exposure Category										
MSM	371	77.6%	65	63.7%	41	65.1%	43	62.3%	520	73.0%
IDU	30	6.3%	12	11.8%	<4	-	4	5.8%	49	6.9%
MSM/IDU	15	3.1%	<4	-	<4	-	<4	-	23	3.2%
Heterosexual	30	6.3%	15	14.7%	9	14.3%	9	13.0%	63	8.8%
Other/Unk.	32	6.7%	7	6.9%	8	12.7%	10	14.5%	57	8.0%
Age										
<20	14	3.0%	<4	-	0	-	<4	-	18	2.6%
20-24	19	4.0%	4	3.9%	0	-	0	0.0%	23	3.2%
25-34	184	38.5%	35	34.3%	17	27.0%	17	24.6%	253	35.5%
35-44	172	36.0%	33	32.4%	34	54.0%	31	44.9%	270	37.9%
45-54	64	13.4%	18	17.6%	5	7.9%	13	18.8%	100	14.0%
55-64	16	3.3%	6	5.9%	<4	4.8%	7	10.1%	32	4.5%
65+	9	1.9%	<4	-	4	6.3%	0	-	16	2.2%
County										
Honolulu	391	81.8%	82	80.4%	50	79.4%	47	68.1%	570	80.1%
Hawaii	48	10.0%	13	12.7%	6	9.5%	9	13.0%	76	10.7%
Maui	25	5.2%	6	5.9%	7	11.1%	11	15.9%	49	6.9%
Kauai	14	2.9%	<4	-	0	-	<4	-	17	2.4%
Total	478	100%	102	100%	63	100%	69	100%	712	100%

- Note:
- 1. All cells are shown as percent of total state data.
- 2. Others: Includes cases in mixed non-Hawaiians, Koreans, Samoans, Guamanians, Marshallese, Micronesians, Palauans, other Pacific Islanders, Vietnamese, and Laotians. The numbers of AIDS cases in each of these API group are so small (<5) that they have to be summed together.
- 3. Unknown Residence=4

HIV/AIDS in Hawaiian/Part-Hawaiian

Hawaiian/Part-Hawaiians (Hawaiians) represent 8.6 % of the State of population and accounted for 10.7% (287) the total diagnosed AIDS cases as of December 31, 2001 (Figure 3.35). AIDS cases among Hawaiians decreased from 40 cases in 1996-1997 to 21 cases in 1998-1999, then increased to 36 cases in 2000-2001. In 2000-2001, the rate for Hawaiians was 34.7 per 100,000 population, which is higher than the average state rate (18.2 per 100,000) and was the second highest rate in Hawai'i.

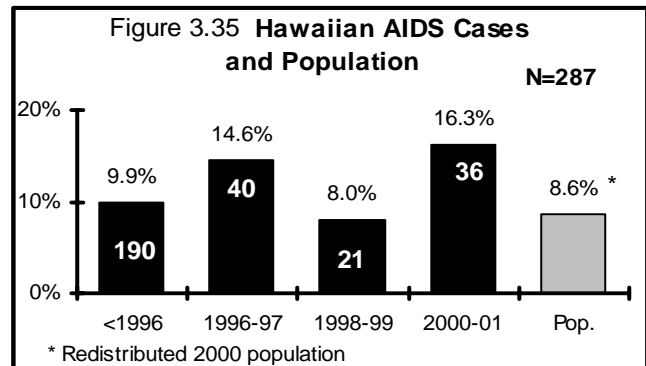


Table 3.15 illustrates the demographics of the Hawaiian AIDS cases. Males accounted for most of the cases (249). The number of female cases remained the same (18) before 1996 as compared with 1996-2001, though the 1996-2001 time period was half as many years. Furthermore, the proportion of AIDS among females increased from 9.5% before 1996 to 18.9% in 1996-2001. Hawaiians accounted for 19.4% of female AIDS cases in the state

MSM continues to be the primary risk factor for Hawaiians (206/285, 72%). Heterosexual contact more than doubled in the current 6-year period as compared with the previous 12 years (13 vs. 11 cases). Seventy-five percent (75%, 213/285) of Hawaiian AIDS cases are between 25 and 44 years old and 6% are under 25.

Most Hawaiian AIDS cases were diagnosed in Honolulu County (73.3%) though the relative proportion decreased for the 1996-2001 time period. Hawaiian AIDS cases in Maui County increased in the 1996-2001 time period

Table 3.15 Hawaiian AIDS Cases, Hawaii, 1983-2001

Characteristic	<1996		1996-2001		Cumulative	
	No.	%	No.	%	No.	%
Sex						
Male	172	90.5%	77	81.1%	249	87.4%
Female	18	9.5%	18	18.9%	36	12.6%
Exposure Category						
MSM	148	77.9%	58	61.1%	206	72.3%
IDU	16	8.4%	8	8.4%	24	8.4%
MSM/IDU	6	3.2%	5	5.3%	11	3.9%
Heterosexual	11	5.8%	13	13.7%	24	8.4%
Other/Unk.	11	5.8%	11	11.6%	20	7.1%
Age						
<25	13	6.8%	5	5.3%	18	6.3%
25-34	83	43.7%	32	33.7%	115	40.4%
35-44	59	31.1%	39	41.1%	98	34.4%
45-54	27	14.2%	13	13.7%	40	14.0%
>54	8	4.2%	6	6.3%	14	4.9%
County						
Honolulu	143	75.3%	66	69.5%	209	73.3%
Hawaii	28	14.7%	15	15.8%	43	15.1%
Maui	14	7.4%	12	12.6%	26	9.1%
Kauai	5	2.6%	<4	-	7	2.5%
Total	190	100%	95	100%	285	100%

(7.4% to 12.6%)

HIV/AIDS in Filipinos

Filipinos have the fourth highest proportion and number of AIDS cases in Hawai'i. Filipinos represent 18 % of population and had 5.3 % (141/2681) of the diagnosed AIDS cases as of December 2001 (Figure 3.36). The number of AIDS cases among Filipinos decreased from 19 cases in 1996-1997 to 12 cases in 1998-1999, and then increased to 18 cases in 2000-2001. In 2000-2001, the AIDS rate for Filipinos was 8.2 per 100,000 population, which is much lower than the average state rate (18.2).

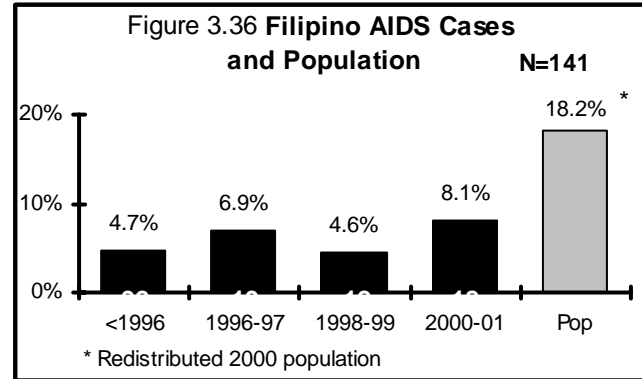


Table 3.16 Filipino AIDS Cases, Hawaii 1983-2001

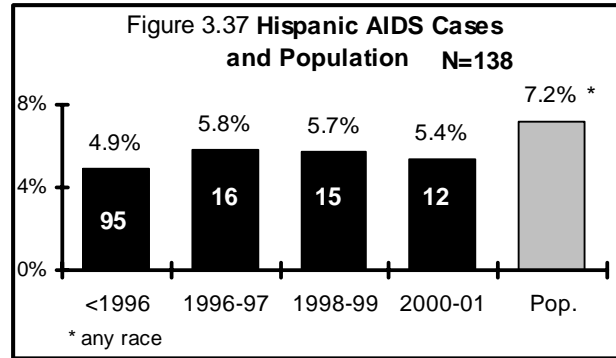
Males accounted for most of the Filipino cases (122/141). The proportion of females Filipino AIDS cases is higher than that of non-Filipino female AIDS cases (13.5% vs. 6.6%) (Table 3.16). Most (67.3%) newer cases of Filipino AIDS (1996-2001) have MSM as the risk factor (33/49), a decrease from 74% during the initial 12-year time period. Seventy-five percent of AIDS cases in the Filipino community were 25-44 years old.

Most (81%, 38/49 cases statewide) Filipino AIDS cases in 1996-2001 were residents of Honolulu County. Limited number of cases residing in other counties make trend analysis impossible.

Characteristic	<1996		1996-2001		Cumulative	
	No.	%	No.	%	No.	%
Sex						
Male	81	88.0%	41	83.7%	122	86.5%
Female	11	12.0%	8	16.3%	19	13.5%
Exposure Category						
MSM	68	73.9%	33	67.3%	101	71.6%
IDU	4	4.3%	<4	-	7	5.0%
MSM/IDU	4	4.3%	<4	-	5	3.5%
Heterosexual	10	10.9%	6	12.2%	16	11.3%
Other/Unk.	6	6.5%	6	12.0%	12	8.5%
Age						
<25	6	6.5%	0	0.0%	6	4.2%
25-34	36	39.1%	10	20.4%	46	32.6%
35-44	35	38.0%	25	51.0%	60	42.6%
45-54	10	10.9%	8	16.3%	18	12.8%
>54	5	5.4%	6	12.2%	11	7.8%
County						
Honolulu	76	82.6%	38	77.6%	114	80.9%
Hawaii	9	9.8%	6	12.2%	15	10.6%
Maui	1	1.1%	4	8.2%	5	3.5%
Kauai	6	6.5%	1	2.0%	7	5.0%
Total	92	100%	49	100%	141	100%

HIV/AIDS in Hispanics

One hundred thirty-eight (138) Hispanic AIDS cases have been diagnosed through December 2001. People of Hispanic origin comprised 5.1% of the total number of AIDS cases from 1983-2001 (5.7% in 1996-2001). Hispanics comprise 7.2% of the total State population. The proportion of AIDS cases among Hispanics has remained constant in the current 6 year period (Figure 3.37). The number of AIDS cases among Hispanics decreased from 16 cases in 1996-1997 to 12 cases in 2000-2001.



In 2000-2001, the AIDS rate for Hispanics was 13.7 per 100,000 population, which is lower than the state average (18.2 per 100,000).

Males accounted for most of the Hispanic cases (125) (Table 3.17). The proportion of Hispanic AIDS among females increased from 7.4% before 1996 to 14% in 1996-2001. Seventy-three percent (73.7%, 97/138) of the overall Hispanic AIDS cases have MSM as their risk factor. The 1996-2001 time period indicates a reduction to 62.8% (27/43). The proportion of IDU AIDS among Hispanics was higher than the state average (15.9% vs. 7.2%).

Six and a half percent (6.5%, 9) of all Hispanic AIDS cases were under the age of 25 and 78% (108/138) were between 25 and 44 years old at the time of diagnosis. Those between 45 and 54 increased from 8.4% (8/95) to 20.9% (9/43) between the initial (1983-1995) time period and the current (1996-2001) time period.

The number and proportion of Hispanic AIDS cases has been decreasing in Honolulu and Hawai'i Counties. Maui County has shown an increase in both the number and the proportion in the 1996-2001 time period.

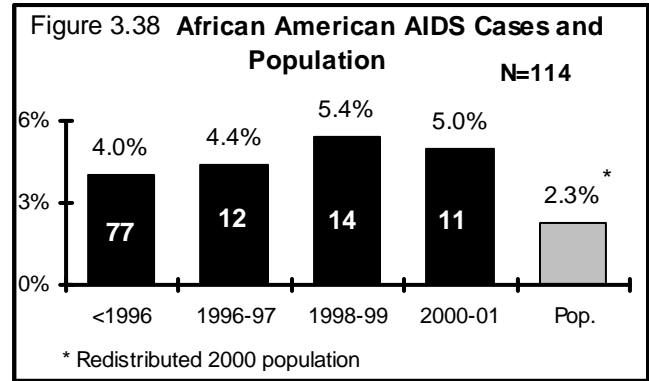
Table 3.17 Hispanic AIDS Cases, Hawaii, 1983-2001

Characteristic	<1996		1996-2001		Cumulative	
	No.	%	No.	%	No.	%
Sex						
Male	88	94.6%	37	88.1%	125	92.6%
Female	7	7.5%	6	14.3%	13	9.6%
Exposure Category						
MSM	70	75.3%	27	64.3%	97	71.9%
IDU	16	17.2%	6	14.3%	22	16.3%
MSM/IDU	5	5.4%	<4	-	6	4.4%
Heterosexual	<4	-	5	11.9%	6	4.4%
Other/Unk.	<4	-	4	9.5%	7	5.2%
Age						
<25	8	8.6%	<4	-	9	6.7%
25-34	34	36.6%	14	33.3%	48	35.6%
35-44	43	46.2%	17	40.5%	60	44.4%
45-54	8	8.6%	9	21.4%	17	12.6%
>54	<4	-	<4	-	4	3.0%
County						
Honolulu	70	75.3%	29	69.0%	99	73.3%
Hawaii	16	17.2%	5	11.9%	21	15.6%
Maui	7	7.5%	8	19.0%	15	11.1%
Kauai	<4	-	<4	-	<4	-
Total	93	100%	42	100%	135	100%*

Note: Persons of Hispanic origin can be of any race.

HIV/AIDS in African Americans

One hundred-fourteen cases (4.3%) of AIDS have been diagnosed in African-Americans through December 2001. Diagnosis of AIDS cases among African Americans has averaged 6.2 cases per year during the current 6-year period under review. The relative number of AIDS cases for African Americans is small in Hawai'i. However, the proportion of AIDS cases who are African-American (4.0%-5.4%) exceeds their relative proportion in the state population (2.3%) (Figure 3.38).



The AIDS rate for African Americans in 2000- 2001 was 38.7 per 100,000 population, more than double the overall state rate (18.2 per 100,000). It is the-highest rate in the state for any race/ethnic group. Female African American AIDS cases have increased from less than 4 cases before 1996 to 8 cases in the 1996-2001 time period (Table 3.18). African American AIDS with a risk factor of injecting drug use has increased from 11.7% (9/77) before 1996 to 24.3% (9/37) in (1996-2001). The percentages of AIDS among African Americans due to IDU or MSM/IDU were much higher than that among non-African Americans (15.8% vs. 7.2% for IDU and 12.3% vs. 6.8% for MSM/IDU).

Seventy-seven percent (88/115) of the cases of AIDS in African Americans were diagnosed between the ages of 25 and 44. Cases were diagnosed between the ages of 45 and 54 increased from 14.3% (11/77) to 24.3% (9/37) in the current time period (1996-2001).

More than 90% of the African American AIDS cases were diagnosed in Honolulu County between 1983 and 2001 with little change in this distribution in the past six years.

Table 3.18 African American Cases, Hawaii, 1983-2001

Characteristic	<1996		1996-2001		Cumulative	
	No.	%	No.	%	No.	%
Sex						
Male	74	96.1%	29	78.4%	103	90.4%
Female	<4	-	8	21.6%	11	9.6%
Exposure Category						
MSM	50	64.9%	13	35.1%	63	55.3%
IDU	9	11.7%	9	24.3%	18	15.8%
MSM/IDU	11	14.3%	<4	-	14	12.3%
Heterosexual	<4	-	5	13.5%	7	6.1%
Other/Unk.	5	6.5%	7	18.9%	12	10.5%
Age						
<25	<4	-	<4	-	<4	-
25-34	25	32.5%	8	21.6%	33	28.9%
35-44	36	46.8%	19	51.4%	55	48.2%
45-54	11	14.3%	9	24.3%	20	17.5%
>54	<4	-	0	-	<4	-
Total	77	100%	37	100%	114	100%

HIV Testing in the General Population and in Special Populations

HIV Counseling and Testing Program

The Department of Health HIV Counseling and Testing (C&T) Program provides free anonymous and confidential HIV screening to those who choose to access it. HIV testing is also provided by private providers. The data presented herewith is only from the HIV C&T Program.

By December 2002, there were a total of 180,438 HIV tests performed statewide since the program's inception in 1985. Ninety-two percent (92%) of clients opted to test anonymously in 1998-2002. The HIV positivity rates were similar for those who tested anonymously (0.44%) as compared to those who tested confidentially (0.46%) in 1998-2002. The number of anonymous HIV tests decreased each year from 1998 to 2001 and increased in 2002. No clear trend for clients who opted for confidential testing was seen. There were more males (95,885, 56.5%) tested than females (73,889, 43.5%). 605 positive test results were detected from 114,730 HIV tests given statewide between 1993 and 2002, for an average positive rate of 0.5%. The number of HIV tests conducted annually decreased gradually each year from 15,877 in 1993 to 8,232 in 2001. In 2002, the number of HIV tests conducted increased to 8,552, yielding 0.6% positive rate. It is the first time an increase has been seen in both male and female rates in the past 7 years (Figure 3.39). Data also indicate higher numbers of males have been tested and have higher positive test rates than females for that 10 year period. Among males, the rate of positive test appeared to be stable from 1996-2001, ranged 0.6% to 0.7%, and increased in 2002 (0.9%). Among females, the rate continues to be consistent in 1998-2002 at a 0.1% positive rate.

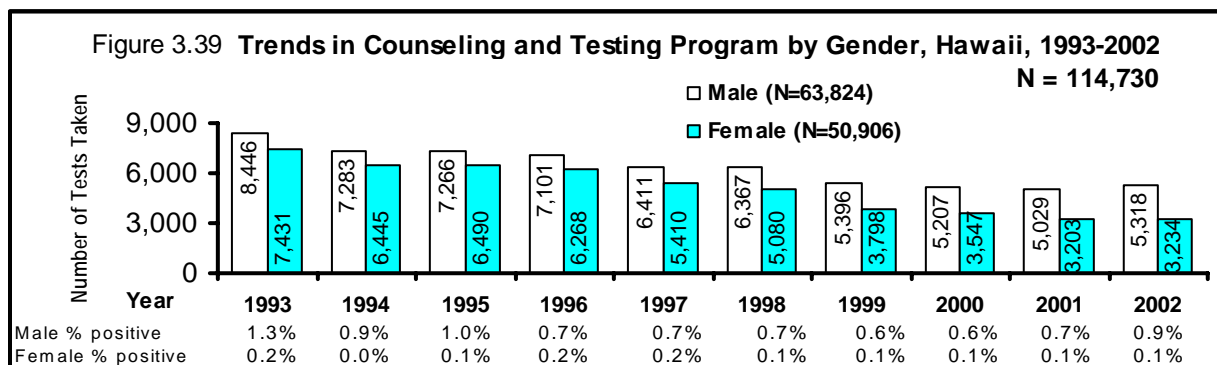
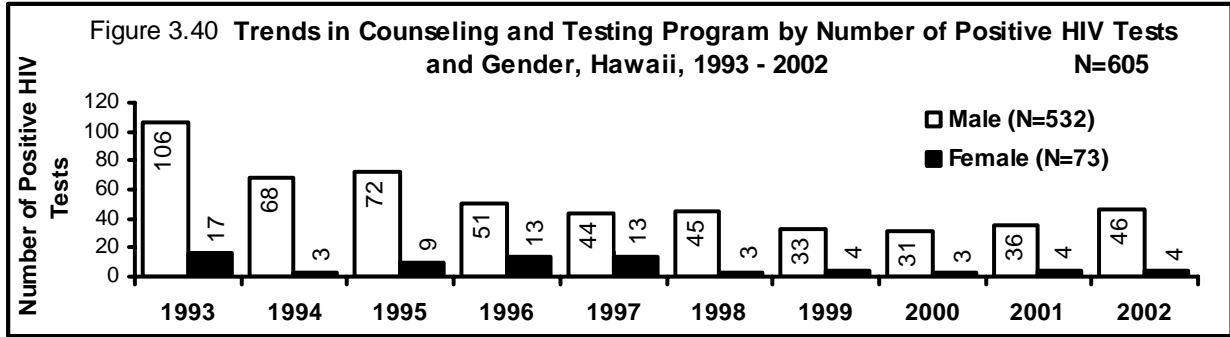


Figure 3.40 shows HIV positive test results by gender during that same time period. The number of HIV positive results among males has increased from 31 in 2000 to 46 in 2002 indicating a slight increase in HIV positive tests among males. Among females, the number of positive tests has remained constant since 1998, ranging from 3 to 4 HIV positive tests per year.



HIV counseling and testing services are provided statewide at multiple sites (Table 3.19). Most tests are performed in the public STD and HIV clinic. HIV positive rates were higher at the TB clinic and drug treatment program sites than at other sites. The college clinic test sites have not had any HIV positive case.

Table 3.19 Test Sites, Hawaii C&T Program, 2001-2002

Test Site	# of Tests	Positive	% Positive
STD Clinic	4,797	16	0.33%
Drug Treatment	593	8	1.35%
TB Clinic	20	1	5.00%
Community Health Clinic	455	6	1.32%
Prison	2,079	7	0.34%
HIV Clinic	8,410	55	0.65%
College	385	0	0.00%
Total	16,732	93	0.56%

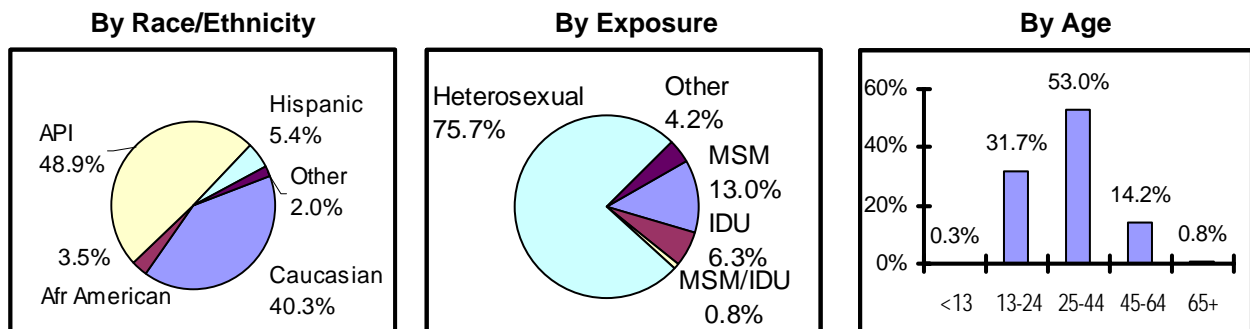
Table 3.20 shows the number of HIV tests performed and the number of HIV positives detected by county. Honolulu County performed the most tests (72.2%). Hawai'i and Maui Counties (0.2%-0.3%) had lower positivity rates than Honolulu or Kaua'i Counties (0.5%). Almost half (49%) of the tests from 1998-2002 were for API, 40% for Caucasians and 11% for the other

Table 3.20 HIV Tests Performed and Positives Detected by County, Counseling and Testing Program, 1998-2002

	Honolulu	Hawai'i	Maui	Kaua'i
Tests	33,394	5,697	4,692	2,485
Positive	183	13	15	12
% positives	0.5%	0.2%	0.3%	0.5%
% of Total Tests	72.2%	12.3%	10.1%	5.4%

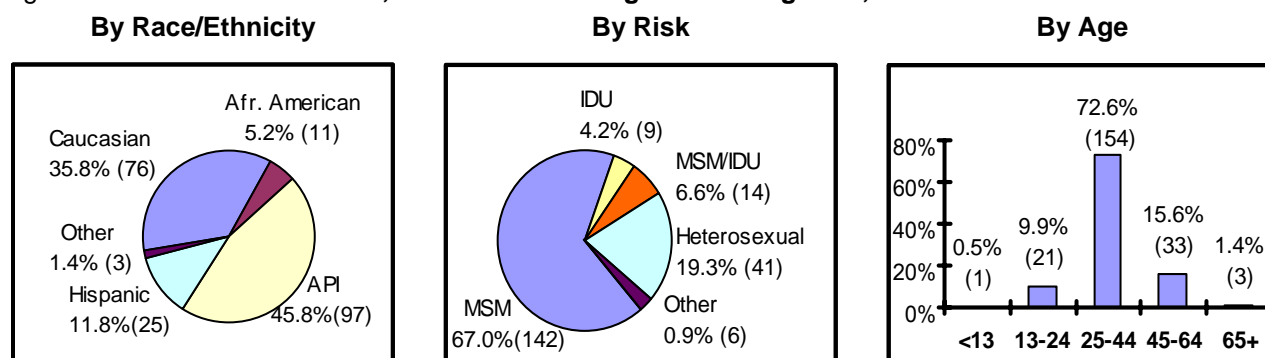
and 11% for the other races/ethnicities (Figure 3.41). One-eighth of the tests were performed for persons who identified MSM as their mode of exposure. Most of the tests were performed for those aged 13–44 years (82%).

Figure 3.41 HIV Tests, Hawai'i Counseling and Testing Data, 1998-2002 N=46,268



A total of 212 positive results was detected from 46,268 tests (Figure 3.42) in 1998-2002: 46% of those positive were API, 36% were Caucasian, and 12% were Hispanic. Two-thirds of the positive tests were classified as exposure through MSM contact, 19% through heterosexual contact, 7% through MSM/IDU and 4% through IDU. Most of the positive tests were detected in persons aged 13–44 years (83%). When comparing the proportion of total tested, higher proportions of positive test results were seen among Hispanics (11.8% vs. 5.4%), African Americans (5.2% vs. 3.5%), and those aged 25-44 (72.6% vs. 53%).

Figure 3.42 HIV Positive Tests, Hawai'i Counseling and Testing Data, 1998-2002 N=212



Not all individuals tested return for their results. In 2001, 72.7% of individuals with negative test results returned for their results. Those was a similar returned

Table 3.21 Return Rates for HIV Test Result, Hawaii C & T Data, 2001-2003

Year	HIV Negative			HIV Positive		
	Total Test No.	Return No.	Return Rate %	Total Test No.	Return No.	Return Rate %
2001	8,191	5,951	72.7%	42	26	61.9%
2002	8,502	6,140	72.2%	48	42	87.5%
2003*	8,390	5,192	61.9%	39	25	64.1%

* May be incomplete

rate in 2002 (Table 3.21). The returned rates for HIV positive test results ranged from 61.9% in 2001 and 87.5% in 2002. The data for 2003 may be incomplete.

HIV Data in Childbearing Women

Routine screening of pregnant women is an important source of HIV seroprevalence data in the female childbearing population. HIV antibodies are passed from mother to infant during pregnancy or childbirth, reflecting the HIV status of the mother. While all infants born of an HIV positive mother will have an HIV positive test, not all infants will become infected with HIV.

The data collected are from four major Hawai'i laboratories with a patient population covering all four counties. Blood is drawn for a routine prenatal workup. If informed consent is obtained, an HIV test is given. Initial testing is by ELISA. Confirmatory testing is by Western Blot. Those women with confirmed positive tests are offered prophylactic treatment to minimize the risk of transmission to their unborn children.

From the second quarter 1997 through 2002, 106,149 HIV tests were performed on pregnant women as part of routine prenatal screening. Fifteen tests were positive for a rate of 19.8 per 100,000 tests. (Table 3.22) Three tests per year were positive for the years 2000, 2001, and 2002.

(Data not shown). It is not known if these positive tests represent the first HIV+ test for these women or even the first pregnancy with a positive HIV status; therefore, no analysis of trend is offered.

Table 3.22 HIV Seroprevalence in Childbearing Women, Hawai'i 1997-2002

1997-2002	# Live Births	# of Tests	# of HIV+	Rate-(# HIV+ tests/Total # of tests)
Total	106,149	75,602	15	0.02%

*Source: Hawai'i AIDS Education Project. 1997 data is from final 3 quarters of the year

Civilian Applicants for Military Service Data

Applicants for military service are routinely screened for HIV. From 1996 through 2002, all 5,516 Hawai'i applicants tested negative for HIV (Table 3.23). These data should be interpreted with caution as it is not representative of HIV seroprevalence in the general population, because anyone who believes they might be HIV positive and likely to be rejected may not apply until they have confirmation of HIV negative status from some other testing source.

Table 3.23 Civilian Applicants to the Military – HIV Testing Results 1996-2002

Year	Hawai'i Applicants		US		
	Tested	Positive	Tested	Positive	Positive Rate per 100,000
1996-2002	5,516	0	2,212,220	667	30.2

Source: US Army Medical Surveillance Activity, requested report Oct 2003. Gender specific data not available.

HIV/AIDS in Prisons and Jails

Inmates of jails and prisons within the state of Hawai'i are not routinely tested for HIV. They are tested upon their own request, when there is clinical indication, when there is "involvement in an incident," or when there is a court order²⁸. The number of known HIV positive individuals and rate within the custody population in Hawai'i has steadily decreased since in 1999 (Table 3.24). All known HIV positive individuals within the Hawai'i prison system are male. The rate of known HIV infection within the Hawai'i male custody population is 0.4%²⁹. The numbers of inmates who are symptomatic for AIDS in Hawai'i has continued to decrease. None were reported had AIDS for 2001. No AIDS related deaths were reported by the Bureau of Justice Statistics for Hawai'i in 1999, 2000 or 2001²⁹.

Table 3.24 HIV/AIDS in Custody Population, Hawai'i, 1999-2001

Year	# HIV+	Rate*	#AIDS+	Rate*
1999	30	0.9	7	0.2
2000	19	0.5	1	< 0.05%
2001	13	0.3	0	0

*Rate is per 100,000 custody population, Bureau of Justice statistics

²⁸ Maruschak, LM. HIV in Prisons, 2000. Bureau of Justice Statistics Bulletin, published by the US Department of Justice. October 2002, (revised 2/24/03).

²⁹ Maruschak, LM. HIV in Prisons, 1999. Bureau of Justice Statistics Bulletin, published by the US Department of Justice. July 2001. www.ojp.usdoj.gov/bjs

Behavioral Risk Factor Surveillance System (BRFSS)

The Behavioral Risk Factor Surveillance System (BRFSS) is a state-based random-digit-dialed telephone survey of adults 18-65 conducted within a state monthly and compiled annually. The program seeks to identify personal health attitudes and behaviors in individuals through a carefully designed survey instrument. Data are self reported and may be subject to recall bias. Only those non-institutionalized individuals with telephones are able to participate. Therefore, they may not be representative of that segment of the population at high risk for HIV. Consequently results from these data should be interpreted with caution.

Questions pertinent to attitudes on HIV testing are shown in Table 3.25 Overall, 80% of those surveyed felt that it was important to know their HIV status. Results were similar among all groups. Most significant is that younger groups who are most likely to engage in high-risk behaviors believe it is important to be tested as compared with older age groups (94% vs. 85%).

Overall, 40% had ever-been tested for HIV (Table 3.26). Those in the 25-34 year old group as well as Caucasians were most likely to be tested. 25% of respondents were tested in 2000 and 22% in 2001. This information was ascertained from 2001; thus, respondents are referring to testing performed within the previous 24 months. This would likely reduce recall bias.

The most important reason to be tested for HIV was just “to find out” through routine testing (41%, Table 3.27). Military service and pregnancy were listed approximately equally as reasons (15-16%) to have been tested. Caucasians were probably tested more because of military service requirements while other ethnic groups were probably tested primarily because of pregnancy. “Insurance” and “relationship” were less common reasons for HIV testing. The remaining reasons for HIV testing were 4% hospitalization, 4% employment and 9% other.

Overall, 44% obtained their tests from private physicians. The counseling and testing sites and STD/AIDS clinics were responsible for only about 15-16% of the testing. Slightly more people in the 18-24 age group received their tests in the counseling and testing venue.

Table 3.25 Perceived Importance of Knowing HIV Status, BRFSS, Hawai'i, 2001 (N=3,620)

	Very	Somewhat	Not	Not
	Important	Important	Importan	Sure
	%	%	%	%
Overall	86	9	<1	3.8
Gender				
Male	84	10	1	5
Female	89	8	<1	3
Age Group				
18-24	94	4	<1	2
25-34	89	7	<1	4
35-44	82	12	1	5
45-54	85	10	<1	4
Race/Ethnicity				
Caucasian	89	8	<1	2
Hawaiian	87	8	<1	4
Filipino	79	10	<1	10
Japanese	85	13	<1	1

Table 3.26 HIV Testing in the General Population, BRFSS, Hawai'i, 2001

	Ever	Tested	Tested
	Tested	in 2000	in 2001
	(N=1,543)	(N=282)	(N=224)
	%	%	%
Overall	40	25	22
Gender			
Male	40	30	27
Female	40	20	16
Age Group			
18-24	45	37	32
25-34	54	29	18
35-44	43	19	22
45-54	33	23	17
Race/Ethnicity			
Caucasia	55	25	22
Hawaiian	41	25	24
Filipino	29	26	17
Japanese	22	21	16

Table 3.27 Reasons for HIV Testing and Where HIV Test Received , BRFSS, Hawaii, 2001

	Reasons (N=1,524)					Location (N=1,531)				
	Routine	Military	Insur	Pregn	Relation	Private	DOH/Red	Hospital/	AIDS Clinic/	Military
	/Find out	Service	-ance	-ancy	-ship	Physician	Cross	Outpt.Clinic	C&T Site	Site
	%	%	%	%	%	%	%	%	%	%
Overall	41	16	7	15	4	44	7	11	15	18
Gender										
Male	46	26	7	<1	4	36	9	10	15	25
Female	37	6	7	30	5	52	5	11	16	11
Age Group										
18-24	47	17	<1	24	2	47	5	8	18	22
25-34	37	21	4	23	5	43	6	9	16	23
35-44	34	18	10	13	5	41	9	11	13	20
45-54	51	9	10	4	4	44	10	15	14	10
Race/Ethnicity										
Caucasian	42	20	4	12	5	40	8	9	15	23
Hawaiian	47	7	9	21	2	46	10	11	23	7
Filipino	38	11	9	20	8	54	4	11	13	12
Japanese	36	7	18	21	2	44	10	16	12	9

Questions regarding the value of medication were asked of more than 3,620 individuals (Table 3.28). Eighty-four percent understood the value of medications to help a patient live longer. Only about half the respondents saw the value during a pregnancy. This particular result is very important. Pregnancy is a time when a woman has the opportunity to be tested and it is extremely important that she understand that there is value in doing so. Community-based education efforts for women to understand the value of testing and medication during pregnancy could have benefit for women and, particularly, women at-risk.

Table 3.28 Beliefs of the General Population in the Value of Medication for HIV+ Individuals, BRFSS, Hawaii, 2001

	Value During A Pregnancy (N=3,623)			Value to Help Patient Live Longer (N=3,622)		
	% yes	% no	% don't know	% yes	% no	% don't know
Overall	48	22	30	84	4	12
Gender						
Male	46	24	31	84	4	12
Female	51	19	29	85	4	11
Age Group						
18-24	47	24	28	85	3	12
25-34	51	25	24	82	7	10
35-44	48	25	27	84	4	12
45-54	48	19	33	87	3	10
Race/Ethnicity						
Caucasian	52	19	28	93	2	5
Hawaiian	43	22	35	79	6	15
Filipino	48	21	31	67	8	26
Japanese	46	23	31	87	3	10

Hepatitis C

Injection drug use is the major route of hepatitis C transmission. As of December 2002, a total of 6,946 positive hepatitis C cases were reported to the Hawai'i Department of Health³⁰. Based on the national prevalence rate of 1.8%, the estimated numbers of persons living with Hepatitis C in Hawai'i could be as many as 16,000 to 21,000³¹. By comparing the estimated prevalence with the actual number of reports received, it can be concluded that Hepatitis C is greatly under-reported. Nine to fourteen thousand persons in the state may not be aware they are infected. A seroprevalence study from frozen sera of incarcerated individuals (DOH conducted) indicated a prevalence of 35% in 1999 and 24% in 2000. Injection drug use was determined to be the most common behavioral risk factor. A case-control survey of hepatitis C patients in 2000 (DOH conducted) indicated that IDU, having unprotected sex with IDU and receiving a blood transfusion were the primary risk factors³¹.

Hepatitis C is found to be common (50%-90%) among HIV-infected injection drug users (IDUs)³². However, Hawai'i does not currently have this co-infection data. The HSPAMM Program, open to all HIV positive individuals in the state showed that approximately 14% of new enrollees tested were co-infected with HIV and Hepatitis C (156 positive tests from 1,111 enrollees between September 1998 and February 2003).

³⁰ Source: Special data requested from Hawai'i DOH, Disease Outbreak Control Division, May 2004.

³¹ Hepatitis C in Hawai'i, A strategic Plan for Action. Hawai'i STD/AIDS Prevention Branch, Hawai'i Department of Health, September 2003

³² http://www.cdc.gov/hiv/pubs/facts/HIV-HCV_Coinfection.htm

Chapter IV

What are the Patterns of Utilization of HIV/AIDS Care Services for Persons in the State of Hawai'i?

This section uses data from Chapter II and III and program-specific data to clarify needs and utilization patterns for HIV/AIDS care planning groups (CPG's). Both HRSA and the State funded programs are examined to better understand of HIV care the State of Hawai'i.

Summary

Hawai'i clients are able to receive multiple services from multiple programs. Duplication of data is possible between counties, but not in each county level

In 2001, Ryan White Title II funded 1,527 clients including those in Hawai'i's AIDS Drug Assistance Program (HDAP, 295 clients) and the Hawai'i Insurance Continuation Program (H-COBRA, 39 clients). Services provided to Title II clients in 2001 were primarily medical care (518), case management (1,270), dental care (328) and mental health and counseling (76) food bank/home delivered meals (538) and housing assistance (248), and other services.

Recipients of Title II funds in 2001 were primarily males (86.1%), Caucasians (56.1%) or API (15.6%) and aged 20-44 (59.3%). Proportionately, fewer of these clients were to be Caucasian and API as compared with persons living with AIDS during 2001. This may be due to data classified as "Other".

A total of 1,001 clients received services at the following AIDS Service Organizations statewide during 2002: Life Foundation (624), Maui AIDS Foundation (154), Big Island AIDS Project (101), West Hawai'i AIDS Foundation (77), and Malama Pono (45).

A total of 265 clients utilized Title III CARE Act Services at the Waikiki Health Center and the Community Clinic of Maui during 2002. Almost half of the Title III clients had CDC-defined AIDS. Slightly more than half of the clients received highly active anti-retroviral therapies; one in three received none. Almost half of the clients lived below the Federal poverty level; almost one in three were without medical insurance.

In 2002, 885 HIV+ clients received State funded support services from the Hawai'i Seropositivity and Medical Management Program (HSPAMM). One third of the new HSPAMM clients who enrolled each year between 1993 and 2002 resided in Hawai'i less than 2 years; nearly one third of the clients had CD4 levels below 200; nearly one third of the clients were enrolled in HSPAMM within one year of their first HIV positive test in 2001-2002. Co-infection with Hepatitis C was observed in 14% of the total HSPAMM clients tested.

The Ryan White CARE Act was enacted by Congress in 1990 and reauthorized in 1996 and 2000 to fund primary care and support services for individuals living with HIV disease who lack health insurance and financial resources for their care. CARE Act Program Grants are administered by the HIV/AIDS Bureau of the Health Resources and Services Administration (HRSA) through

Titles I-IV (Appendixes IV). Title II funding received by the State of Hawai'i is used to fund health care and provide support services for individuals and families affected by HIV. It includes HIV primary medical care services and other HIV support services provided by DOH through Hawai'i's AIDS Drug Assistance Program (HDAP), insurance coverage through the Hawai'i Insurance Continuation Program, (H-COBRA) and contractors. These contractors include: Life Foundation (Honolulu County), West Hawai'i AIDS Foundation³³ (Kona side, Hawai'i County), Big Island AIDS Project³⁴ (Hilo, Hawai'i County), Maui AIDS Foundation (Maui County), Malama Pono (Kaua'i County), Gregory House, Save the Food Basket. Waikiki Health Center (Honolulu County) and Maui Community Clinic (Maui County) provide medical support under both Title II and III.

The State funds the Hawai'i Seropositivity and Medical Management (HSPAMM) Program to provide routine health services semiannually for any HIV positive individuals. Together with HDAP and H-COBRA, it is facilitated through the HIV Medical Management Service Section of the STD/AIDS Prevention Branch, DOH.

Statewide Ryan White CARE Act Data

The client counts received from the individual Ryan White CARE Act program reports are unduplicated; however, a total of CARE ACT Clients from these programs contains duplicates because clients accessing multiple services from multiple programs³⁵. Also, clients can receive multiple types of services within the individual programs.

In 2001, 1,527 clients served were funded by Ryan White Title II Awards through: Hawai'i's AIDS Drug Assistance Program (HDAP, 295 clients), the Hawai'i Insurance Continuation Program (H-COBRA, 39 clients), Life Foundation (289 clients), West Hawai'i AIDS Foundation (74 clients), Big Island AIDS Project (61 clients), Maui AIDS Foundation (111 clients), Malama Pono (38 clients), Waikiki Health Clinic (150 clients), Gregory House (119 clients) and Save the Food Basket (351 clients).

The 1,527 Title II clients received services were primarily for medical care (1,400), dental care (328), and mental health/counseling (316) (Table 4.1). The average number of visits among Title II clients was highest for medical care (4.7 visits/per client). In addition to the services listed in Table 4.1, Hawai'i Title II funds were used to provide support services to the clients, which included emergency financial assistance (593), food bank/home delivered meals (528), housing assistance (248), transportation (177), client advocacy (126), other case management (38), service/outreach/secondary prevention counseling (6), non-mental health counseling (1) as well as a variety of other support services (112).

Table 4.1 Utilization of Ryan White Title II Service, Average Visits per Clients, Hawaii, 2001

	Medical	Dental	Mental Health	Subs. Abuse
Total Client Visits (No.)	1,400	328	316	1
Clients Receiving Services (No.)	295	163	67	1
Visits per client (Average)	4.7	2.0	4.7	1.0

*possible client count duplication

³³ Now combined and called Hawai'i Island HIV/AIDS Foundation - Kona

³⁴ Now combined and called Hawai'i Island HIV/AIDS Foundation - Hilo

³⁵ Source: Hawai'i Department of Health STD/AIDS Prevention Branch.

Of the 1,527 Hawai'i Title II clients who received services during 2001, the majority were male (86.1%), Caucasians (56.1%) or APIs (15.6%), aged 20-44 (59.3%). The table 4.2 shows the proportions of CARE Act Title II clients accessing care, compared with persons living with AIDS (PLWA) as of year-end 2001. Note that some of the care services clients were diagnosed in another states, but PLWA data are primarily Hawaii diagnosed cases. At the same time, keep in mind that care services data contain duplicate numbers due to the multiple services between counties.

Hawai'i AIDS Drug Assistance Program (HDAP)

The Hawai'i AIDS Drug Assistance Program provides FDA approved HIV related prescription drugs to underinsured and uninsured individuals living with HIV/AIDS. Eligibility is based on an income not exceeding 400% of the Federal Poverty Level. The primary funding source is Title II with supplementation from the State of Hawai'i. Persons enrolled in HDAP during the year from June 2001 through June 2002

have been able to receive the following classes of anti-retroviral drugs: nucleoside analogues, protease inhibitors, non-nucleoside reverse transcriptase inhibitors. Other types of drugs available through the program include those used to treat opportunistic infection and metabolic disorders.

As reported in the National AIDS Drug Assistance Program (ADAP) Monitoring Project Survey, the Hawai'i Program (HDAP) served 158 clients who received a total of 624 prescriptions during the month of June 2002. This represents an increase of 24% above the 127 clients who received total of 466 prescriptions, a 34% increase, in June 2001. Total drug expenditures for June 2002 totaled \$135,098, an increase of 26% over the June 2001. The 624 prescriptions by category include 34% NRTI, 10% nNRTI, 13% PI, 42% OI/other. (Data not shown)

Those 158 clients served by HDAP in June 2002 were primarily male (91%), non-Hispanic Caucasian (58%), or Asian/Pacific Islander (28%), all over the age 19 (Table 4.3). Fifty-eight percent (58%) were over the age of 45. Seventy eight percent (78%) were at or below the 200% Federal poverty level. Twenty-two percent (22%) were between 201% and the maximum 400% Federal poverty level. Twenty-eight percent (28%) had Medicare coverage.

Table 4.2 Comparison of CARE ACT Title II Clients and Persons Living with AIDS, 2001

	CARE ACT Clients ^d 2001 N=1,527	PLWA 12/31/01 N=1,154
Sex		
Male	86.1%	90.9%
Female	13.2%	9.1%
Unknown	0.8%	0.0%
Race/Ethnicity		
Caucasian	56.1%	63.6%
African Am.	6.3%	5.4%
Hispanic	9.2%	6.6%
Asian and Pi ^a	15.6%	23.6%
Other (Ind.) ^b	12.8%	0.9%
Age^c		
<13	0.8%	0.3%
13-19	0.5%	0.2%
20-44	59.3%	46.5%
>45	38.5%	52.9%
Unknown	0.9%	0.0%
Total	100.0%	100%
Hawaiian/PI	9.7%	N/A

^a Including Hawaiian/Pacific Islanders

^b Including unknown, American Indian & Multi-

^c For PLWA, it is the current age at end of 200

^d May have duplication

The immune status of the 94 patients enrolled over the 12 month period from July 2001-2002 is suggested by 29% having CD4 counts less than 200, 35% with CD4 counts between 200 and 500, and 18% having CD4 counts above 500. Eighteen percent (18%) had CD4 counts that were unknown.

Note that the National ADAP Monitoring Project Survey data are based on one month of data collection (June) and therefore, may not necessarily be representative of the characteristics of those receiving ADAP funds throughout the year.

Hawai'i Insurance Continuation Program (H-COBRA)

The H-COBRA program assists individuals who, because of HIV-related disease, are unable to continue working in their current employment and thus are unable to pay their health insurance premiums. H-COBRA will make the premium payments so that an individual may continue coverage under his/her employer's group health insurance. Eligibility is based on an entitlement to continue the insurance under the 1985 Consolidated Omnibus Reconciliation Act (COBRA). Other criteria which must be met include certification of positive HIV status, Hawai'i residency, and income which is 300% or less than the Federal Poverty Level. (Approximately equal to an annual salary of less than \$30,600.00 for a single individual.).

Program can be extended to family members who lose or are in danger of losing their insurance coverage as a result of the primary policy holder losing his or hers.

During 2001 insurance coverage was extended to thirty-nine unduplicated clients and covered 323 months, (Table 4.4). This is an average of 8.3 months per client at a cost of \$83,913 for the year.

Table 4.4 Unduplicated H-COBRA Clients and Months of Coverage, Hawai'i, 2001

# of Clients	# of Client - Months	# of Months per client
39 unduplicated	323 (8.3 mo/client)	8.3

AIDS Service Organizations

The AIDS Service Organizations (ASO's) include: Life Foundation (Honolulu County), West Hawai'i AIDS Foundation (Kona area, Hawai'i County), Big Island AIDS Project (Hilo area, Hawai'i County), Maui AIDS Foundation (Maui County), Malama Pono (Kaua'i County). These ASO data represent the HIV positive clients who received services. An unknown number of

Table 4.3 Characteristics of Clients Enrolled in the Hawaii AIDS Drug Assistance Program, June 2002, N=158

Sex:	
Male	91%
Female	9%
Race/Ethnicity:	
Caucasian, not Hispanic	58%
African Amer., not Hispanic	4%
Hispanic	8%
Asian/Pacific Islander	28%
American Indian/other	2%
Age Group:	
<20	0%
20-44	42%
>44	58%
Income Status	
<=100% FPL*	28%
101-200% FPL	50%
201-400% FPL	22%
>400%	Ineligible
Drug Insurance Status	
Medicaid	1%
Medicare	28%
Private	15%
None	56%
CD4 Status (N=94) Enrolled During Previous 12 Months	
<200	29%
200-500	35%
>500	18%
Unknown	18%

*Federal Poverty Level

clients may have received services from more than one agency, thus the data may represent some duplication of client numbers in combined ASO data. At the organization level, the clients counts are unduplicated. One client may receive several types of services.

AIDS Service Organizations provide services for individuals with HIV/AIDS including medical, dental, mental health services, and are transportation

assistance. The majority of Title II-funded services provided in 2001 was for face-to-face case management (1,270), followed by medical care (518), and dental care (328, Table 4.5). Private physicians and dentists provided patient care under Title II-funded contracts. The average number of visits per type of service among ASO Title II clients was the highest for mental health therapy/ counseling (3.6 visits/per client).

Table 4.5 Types of Service Provided, ASO, 2001

	No.Visit	Clients	V/C*
Medical care visits/clients	518	165	3.14
Dental care visits/clients	328	163	2.01
Mental health therapy or counseling/clients	76	21	3.62
Substance abuse treatment/counseling	1	1	1.00
Face-to-face case management/clients	1,270	364	3.49
Other case management	38		
Client advocacy	55		
Emergency financial assistance	241		
Housing assistance	135		
Food bank/home delivered meals	202		
Transportation services	177		
Service/outreach/secondary prevention counseling	6		
Non-mental health counseling	1		
Other support services	112		

V/C: Average visits per client

Table 4.6 compares the characteristics of those receiving ASO client services funded at the group level and at the individual program level, with persons living with AIDS (PLWA) as of December 31, 2001. These ASO data may include Title II and other sources of funding.

In 2002, there were 1,001 clients who received services statewide from ASO's: 869 (86%) were males, 125 (12.5%) females, 8 (0.8%) transgender and 7 (0.7%) were unidentified. Most of clients were aged 24-44 years (534, 53.8%), Caucasian (528, 52.7%) and had MSM as their mode of exposure to HIV (77.3%).

Of the 1,001 clients served by ASOs, 624 were at the Life Foundation (Honolulu County), 154 at the Maui AIDS Foundation (Maui County), 101 at the Big Island AIDS Project (Hawai'i County), 77 at the West Hawai'i AIDS Foundation (Hawai'i County), and 45 at Malama Pono (Kaua'i County). Males accounted for the vast majority of the clients in all five programs. The distributions of ASO clients by sex and age group were similar among all ASOs except Malama Pono. The proportion of API clients was higher at the Life Foundation (35.1%, Honolulu County) than at any of the other four ASOs. Higher proportions of clients at the Maui AIDS Foundation (88%) and Malama Pono (85%, Kaua'i County) had MSM as their mode of exposure to HIV/AIDS than at the other three ASOs. Clients of the West Hawai'i AIDS Foundation had a higher percentage (22%) of IDU as the mode of HIV/AIDS exposure than at other ASOs.

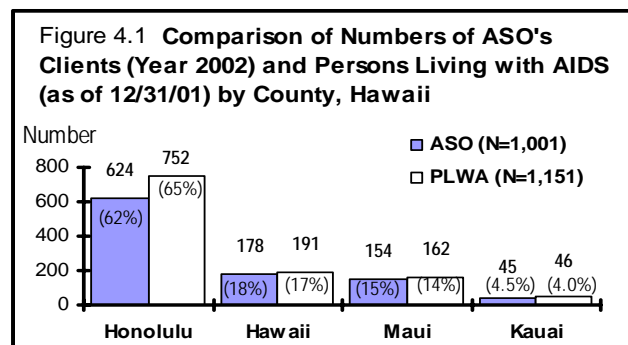
Table 4.6 Demographic Characteristics of Clients in AIDS Service Organizations, Hawaii, 2002

County	Life Fundation Honolulu	BIAP Hawaii	WHAF Hawaii	AIDS Fundation Maui	Malama Pono Kauai	Cumulative	PLWA
Number Served	N=624	N=101	N=77	N=154	N=45	N=1,001	N=1,154
Gender							
Male	538 86.2%	84 83.2%	65 84.4%	138 89.6%	36 80.0%	861 86.0%	90.9%
Female	79 12.7%	16 15.8%	12 15.6%	15 9.7%	<4 -	125 12.5%	9.1%
Transgender	6 1.0%	<4 -	0 -	<4 -	0 -	8 0.8%	0.0%
Unknown	<4 -	0 -	0 -	0 -	6 13.3%	7 0.7%	0.0%
Age							
<13	<4 -	0 -	0 -	<4 -	0 0.0%	<4 -	0.3%
13-24	11 1.8%	<4 -	0 -	0 -	0 -	13 1.3%	0.3%
25-44	339 54.3%	39 38.6%	36 46.8%	81 52.6%	39 86.7%	534 53.3%	46.4%
45-64	258 41.3%	52 51.5%	40 51.9%	71 46.1%	0 -	421 42.1%	49.7%
65+	14 2.2%	0 -	0 -	0 -	0 -	14 1.4%	3.2%
Unknown	0 -	8 7.9%	<4 -	<4 -	6 13.3%	16 1.6%	0.0%
Race/Ethnicity							
Caucasian	296 47.4%	65 64.4%	44 57.1%	96 62.3%	27 60.0%	528 52.7%	63.6%
African Am.	37 5.9%	4 4.0%	<4 -	<4 -	0 -	45 4.5%	5.4%
Hispanic	58 9.3%	7 6.9%	8 10.4%	11 7.1%	<4 -	87 8.7%	6.6%
Asian and PI ^a	219 35.1%	16 15.8%	22 28.6%	36 23.4%	8 17.8%	301 30.1%	23.6%
Native Am./Alas.	0 -	<4 -	0 0.0%	0 -	0 -	<4 -	0.6%
More Than One	0 -	0 -	<4 -	0 -	0 -	<4 -	0.3%
Unknown/other	14 2.2%	7 6.9%	0 -	8 5.2%	7 15.6%	36 3.6%	0.0%
Total	624 100%	101 100%	77 100%	154 100%	45 100%	1,001 100%	100%
Hawaiian/PI	105 16.8%	N/A	N/A	14 9.1%	0	N/A	N/A
Risk Factors							
MSM	476 76.3%	66 65.3%	46 59.7%	148 87.6%	N/A 85.0%	N/A 77.3%	70.6%
IDU	38 6.1%	4 4.0%	17 22.1%	11 6.5%	N/A 3.0%	N/A 7.1%	8.4%
MSM/IDU	37 5.9%	<4 -	0 -	0 -	N/A 5.0%	N/A 4.0%	7.1%
Heterosexual	44 7.1%	12 11.9%	11 14.3%	10 5.9%	N/A 5.0%	N/A 7.9%	6.9%
Other	<4 -	<4 -	0 -	0 -	N/A 0.0%	N/A 0.4%	1.5%
Unknown	26 4.2%	17 16.8%	0 -	0 -	N/A 3.0%	N/A 4.4%	5.0%
Total	624 100%	101 100%	74 100.0%	169 100%	45 100%	N/A 100%	100%

^a including Hawaiian Pacific Islanders

^b Current age as of December 31, 2001 for persons living with AIDS

When these proportions are compared to data for PLWA, the proportions of ASO clients were more frequently female (12.5% vs. 9.1%), API (30.1% vs. 23.6%) and combined MSM and MSM/IDU (81.3% vs. 77.7%). The ASO clients compared with PLWA are younger, because ASO data include persons living with HIV and AIDS, on the other hand PLWA contains only person living with AIDS. The distribution of ASO clients by county was similar to the distribution of persons living with AIDS at the end of 2001 (Figure 4.1).



Housing Service and Save the Food Basket Service

Hawai'i's Gregory House Program³⁶ provides housing and supportive services on a long term, temporary or respite basis for persons who are displaced due to the impact of HIV/AIDS in their lives. They also provide access to appropriate public and private support services. A total 119 clients received services funded through the Ryan White Award in 2001. The services include emergency financial (18) and housing assistance (113). Clients were primarily male (87%), Caucasian (56%) and aged 20-44 (64%). Thirteen percent (13%) were Hawaiian or Pacific Islanders and 11% were Hispanic.³⁷

Save the Food Basket provides food distribution as well as services to those impacted by HIV/AIDS through its Care Act funding. Services provided in 2001 included food bank/home-delivered meals (326), emergency financial assistance (334) and client advocacy services (71). Clients were primarily male (82%), Caucasian (56.4%) or Hawaiian/Pacific Islander (17%), and aged 25-44 (93.7%).

Waikiki Health Center/ Community Clinic of Maui

Waikiki Health Center (Honolulu County) provides medical support under both Titles II and III to HIV+ individuals; the Community Clinic of Maui (Maui County) provides the same services through Title III funding. The specially targeted groups for outreach or service during 2002 were rural populations, women, racial/ethnic minorities/communities of color, homeless, gay, lesbian, bisexual adults, runaway or street youth, and injection drug users.

A total of 265 (83 new) HIV positive clients received various services in 2002³⁸(Table 4.7). Each client was eligible to receive multiple types of services. Total visits for 2002 were as follows: medical care

(1,520), mental health (672), substance abuse service (60) and dental care (10). The average number of visits per client was 5.7 for medical care, services. All 265 clients received health education/risk reduction information.

During 2002, primary care services were provided to the HIV positive clients through the Early Intervention Service (EIS) program

Table 4.7 Utilization of Ryan White Title II* & III Service in Waikiki Health Center and Maui Community Clinic by Type of Service, Hawaii 2002

Service Categories	Total Clients (Unduplicated)	Total Visits in 2002
Ambulatory/outpatient medical care	265	1,520
Mental health services	103	672
Oral health care	5	10
Substance abuse services-outpatient	15	60
Client advocacy	5	
Health education/risk reduction	265	
Nutritional counseling	45	
Outreach services	39	
Psychosocial support services	103	
Referral for health care/supportive services	255	
Referrals to clinical research	253	
Treatment adherence counseling	41	
Other services	3	

* Including a few clients in Title II fund (less than 8).

³⁶ Source: <http://www.gregoryhouse.org/about.htm>

³⁷ Source: Department of Health, STD/AIDS Prevention Branch.

³⁸ Source: Ryan White CARE Act Data Report, 2002, Waikiki health Center

and referral services. Ambulatory/outpatient medical care, dispensing of pharmaceuticals, mental health services, nutritional counseling, obstetrics/gynecology, substance abuse service and other services were the services made available. A total of 149 clients were referred outside the EIS program (Title III) for the following services that were not available within EIS program: dermatology, dispensing of pharmaceuticals, gastroenterology, neurology, optometry/ophthalmology, oral health care, and rehabilitation services.

During 2002, the Title III clients (all HIV+) were mostly male (89.4%), Caucasian (57.7%), and between the ages of 25 and 44 (64.5%) (Table 4.8). The primary type of exposure was MSM (47.9%). There were 156 clients who received TB skin tests; none were positive. 142 received screening/testing for syphilis; 44 received screening/testing for any treatable sexually transmitted disease (STD) other than syphilis and HIV; 28 received treatment for STD (other than syphilis and HIV); 49 received screening /testing for hepatitis C and two received treatment for hepatitis C.

Table 4.8 Selected Characteristics of Ryan White CARE ACT Title III ^a Clients, 2002 (N=265)

Sex	No.	%	Ethnicity	No.	%	Risk Factor	No.	%
Male	237	89.4%	Hispanic	21	7.9%	MSM	127	47.9%
Female	27	10.2%	Non-Hispanic	236	89.1%	IDU	6	2.3%
TG	<4	-	Unknown	8	3.0%	MSM/IDU	8	3.0%
Age			Race			Heterosexual	26	9.8%
<13	<4	-	Caucasian	153	57.7%	Perinatal	<4	-
13-24	5	1.9%	African American	11	4.2%	Transfusion	<4	-
25-44	171	64.5%	Asian	17	6.4%	Other	80	30.2%
45-64	84	31.7%	Hawaiian/PI	9	3.4%	Undetermined	15	5.7%
65+	4	1.5%	Unknown	75	28.3%	Medical Insurance (12/31/02)		
Enrollment Status (12/31/02)			Household Income			Private	53	20.0%
Active-new	79	29.8%	≤FPL ^b	131	49.4%	Medicare	55	20.8%
Active-continue	176	66.4%	101-200% FPL	52	19.6%	Medicaid	51	19.2%
Deceased	<4	-	201-300%	12	4.5%	Other Public	22	8.3%
Inactive	8	3.0%	>300% FPL	8	3.0%	No insurance	81	30.6%
Unreported/Unk.	0	0.0%	Unknown	62	23.4%	nreported/Unk.	<4	-

^a Including less than 8 Title II clients

^b Federal Poverty Level

At the end of 2002, nearly half (49.4%) the clients were below the Federal poverty level; nearly one third were without medical insurance; 60% had permanent housing; 17% did not have permanent housing and 19% had unknown/unreported living arrangements; 45% (119) had CDC-defined AIDS; 56.2% (149) received highly active anti-retroviral therapies; 8.3% (22) received mono or dual therapy and 35% (94) received none.

The Ryan White CARE Act funding was also used to support HIV counseling and testing services. There were 144 clients (anonymous) who received HIV pretest counseling in 2002. Among these 144 clients, three had positive test results. A total of 103 clients received post test counseling unrelated to their test results.

HSPAMM Program Utilization

The HSPAMM program is state funded. All HIV positive individuals (including AIDS or HIV only) are eligible for HSPAMM services paid physician's office visits at an individual's own physician as well as laboratory testing twice per year. All information received by the HSPAMM program contains only coded identifiers to maintain confidentiality. The patients are able to receive regular medical care and the DOH is able to collect information on HIV infection while promoting counseling and early referral to a network of supportive services.

There were 878 active participants in HSPAMM as of December 1, 2002 (Table 4.9). Of these, 777 (89%) were male and 101 (11%) were female. Caucasians were the major racial group (500, 57%), followed by combined APIs (219, 25%), Hispanics (60, 7%) and African American (33, 4%). Hawaiians accounted for 10% of the participant total. Most participants were age 40-49 at the time of the last visit (322, 40%). The most frequent modes of exposure were MSM (69%, 624) and heterosexual contact (13%, 120). The majority of the participants resided in Honolulu County. Table 4.9 also compares HSPAMM clients with persons living with AIDS in Hawai'i.

There are no direct measures of how completely the HIV/AIDS positive population utilizes the HSPAMM program. However, the following comparison does indicate that active HSPAMM participants have many similarities with "People Living with AIDS" (PLWA), a group tracked by the DOH AIDS Surveillance System who were diagnosed in Hawai'i. Current age (as of 12/31/01) was used for the PLWA category, while the age at the time of the last visit during 2001 was used for the HSPAMM client population.

The demographic characteristics of clients currently enrolled in HSPAMM are similar to most categories of PLWA except age. A higher percentage of PLWA (79.2%) were over 40 than HSPAMM clients (63%). PLWA are significantly older than the HSPAMM participants, which is expected as HSPAMM client data contains both HIV+ only and AIDS. Risk factors showed similar percentages except for heterosexual contact (13% HSPAMM, 6.9% PLWA).

There were 117 new enrollees in 2001 and 152 in 2002 in HSPAMM (Table 4.10). The participants were primarily male, Caucasian, aged 25-44, with CD4 levels >200, and MSM as their risk factor. Comparing the two years of enrollees by age and CD4 levels, the proportions were similar. The proportions of race/ethnicity and exposure mode were similar except that a higher proportion of 2002 enrollees were API and had IDU as their exposure mode for HIV infection. The numbers of enrolling female participants are too few to determine if their increase between 2001 and 2002 is meaningful.

New enrollees of the HSPAMM program do not necessarily represent new diagnoses of HIV/AIDS. The HSPAMM client may have previously received a diagnosis and medical care in another state. Table 4.11 indicates the number of months elapsing between first HIV positive test of 221 new clients and the time of actual enrollment in the HSPAMM program in 2001 or 2002. It ranged between 0 and 246 months (20.5 years) with a mean of 71 months (5 years, 11 months). One quarter of clients (25%) enrolled within three months of their first positive

Table 4.9 Comparison of Active HSPAMM Participants with Persons Living with AIDS, Hawaii

Characteristics	HSPAMM Active		People Living With	
	Participants 12/1/02		AIDS as of 12/31/01	
	No.	%	No.	%
Sex:				
Male	777	89%	1,046	91%
Female	101	12%	105	9%
Total	878	100%	1,151	100%
Race/ Ethnicity				
Caucasian	500	57%	732	64%
Asian/PI total	219	25%	272	24%
Hawawiiian	91	10%	107	9%
Filipino	34	4%	63	6%
Japanese	33	4%	41	4%
Chinese	12	1%	22	2%
Other API	49	6%	39	3%
Hispanic	60	7%	76	7%
African Am	33	4%	62	5%
Am Ind	9	1%	6	1%
Other	55	6%	<4	0%
Total	876	100%	1,151	100%
Age Groups**				
<20	<4	0%	6	1%
20-29	32	4%	12	1%
30-39	254	32%	221	19%
40-49	322	40%	541	47%
50+	192	24%	371	32%
Unknown	6	1%	0	0%
Total	807	100%	1,151	100%
County				
Honolulu	582	66%	752	65%
Hawaii	133	15%	191	17%
Maui	138	16%	162	14%
Kauai	23	3%	46	4%
Total	876	100%	1,151	100%
Risk Factor				
MSM	624	69%	815	71%
IDU	52	6%	97	8%
MSM/IDU	56	6%	82	7%
HETERO	120	13%	80	7%
Perinatal			5	0%
Unknown	26	3%	58	5%
Other	24	3%	17	2%
Total	902	100%	1,154	100%

*includes 3 of unknown status

Table 4.10 Newly-Enrolled HSPAMM Clients (HIV Positive), 2001-2002

Characteristics	2001		2002	
	No.	%	No.	%
Sex:				
Male	110	94%	132	87%
Female	7	6%	20	13%
Race/Ethnicity:				
Caucasian	68	58%	90	59%
African Am.	7	6%	12	8%
Hispanic	12	10%	9	6%
Asian and PI	22	19%	36	24%
Unknown	8	7%	5	3%
Age Group: (Age at enrollment)				
<20	<4		<4	
20-24	<4		4	
25-44	76	65%	100	65%
45-54	31	26%	36	24%
55-64	8	9%	6	9%
65+	<4		<4	
CD4 Count:				
<200	38	33%	47	31%
>200	79	68%	107	70%
AIDS Exposure Category:				
MSM	84	72%	103	68%
IDU	4	3%	12	8%
MSM/IDU	4	3%	6	4%
Heterosexual	24	21%	29	19%
Other	<4		<4	
Total	117	100%	152	100%

Table 4.11 Clients by Number of Months from First HIV+ Test to HSPAMM Enrollment, 2001-2002 Combined

	No.	%
0-3 Months	55	25%
4-12 Months	16	7%
13-24 Months	18	8%
25-60 Months	26	12%
61-120 Months	49	22%
121-246 Months	57	26%
Total	221	100%

HIV test, nearly one third of clients (32%) enrolled within one year. One quarter of clients (26%) enrolled between ten years and twenty and one half years (120-246 months) of their first positive test. The characteristics of newly enrolled HSPAMM clients are not likely to mirror the patient characteristics of those newly infected or newly diagnosed but rather, the overall epidemic.

Figure 4.2 shows the newly-enrolled HSPAMM participants by length of residence in Hawai'i. There was an average of 173 new enrollees in HSPAMM per year during the current 10 years (1993-2002), with a range of 117 to 229. Approximately one third of clients resided less than 2 year in Hawai'i when they enrolled to HSPAMM. There were higher percentages in 1998 (40%) and in 2001 (46%).

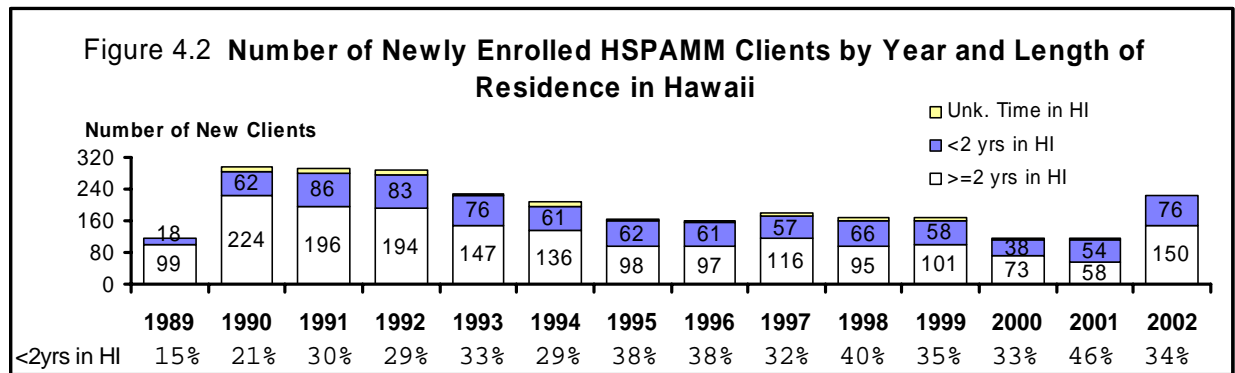
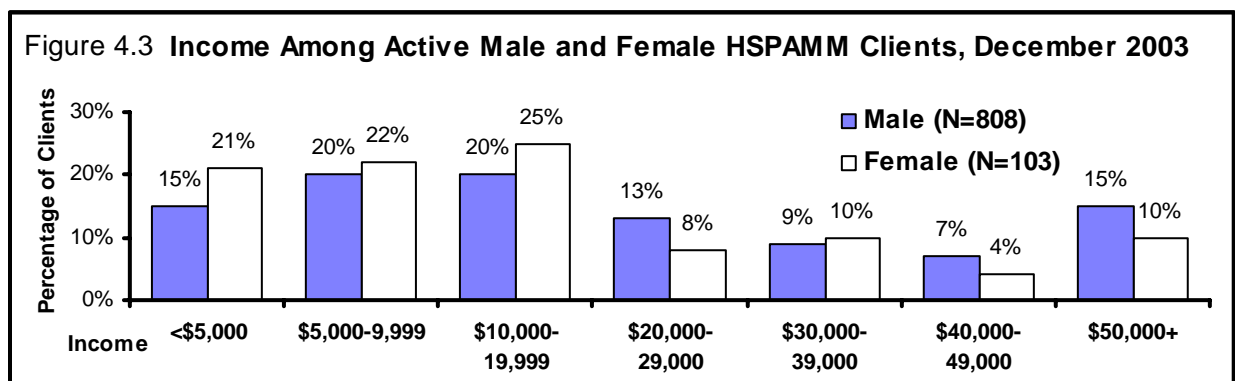


Table 4.12 indicates that of those currently enrolled in HSPAMM only 26% were born in Hawai'i. Sixty-two percent of clients were born elsewhere in the United States and another 11% were born outside the United States.

Table 4.12 HSPAMM Clients by Place of Birth, Hawaii, December 2002

Place of Birth	No.	%
Hawaii	229	26%
Mainland	544	62%
Pacific Island	13	1%
Asia	32	4%
Other Country	54	6%
Unknown	6	<1%
Total	878	100%

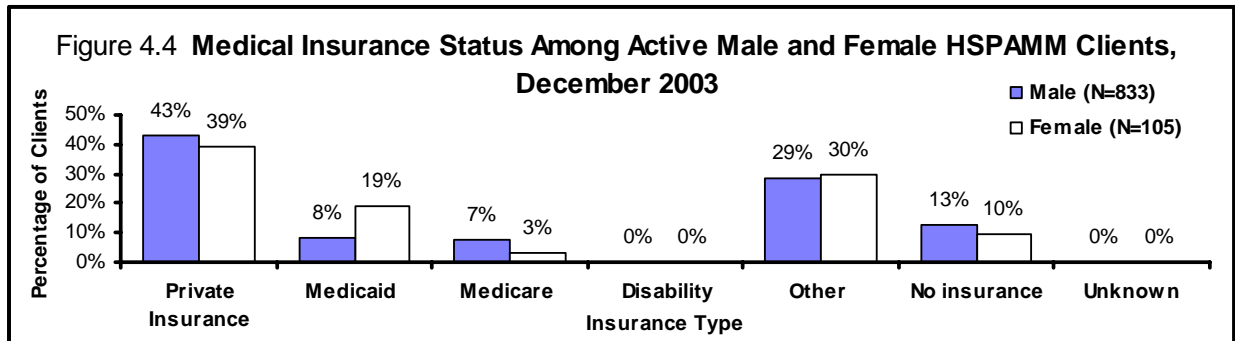
HSPAMM clients had a wide range of income--16% had an income of less than \$5,000, 21% had income of \$5000-\$9,900, 21% had \$10,000 - \$19,999, 12% had \$20,000 - \$29,000, 9% had \$30,000 - \$39,000, 6% had \$40,000 - \$49,000 and 15% had over \$50,000 income. Females enrolled in HSPAMM have lower incomes than males as is true in the general population (Figure 4.3). Sixty eight percent of the females and 55% of the males have income less than \$20,000. Ten percent of the females



and 15% of the males have incomes of \$50,000 or more. The average age of females was younger than the males at the time of diagnosis. This is likely to magnify income disparity further.

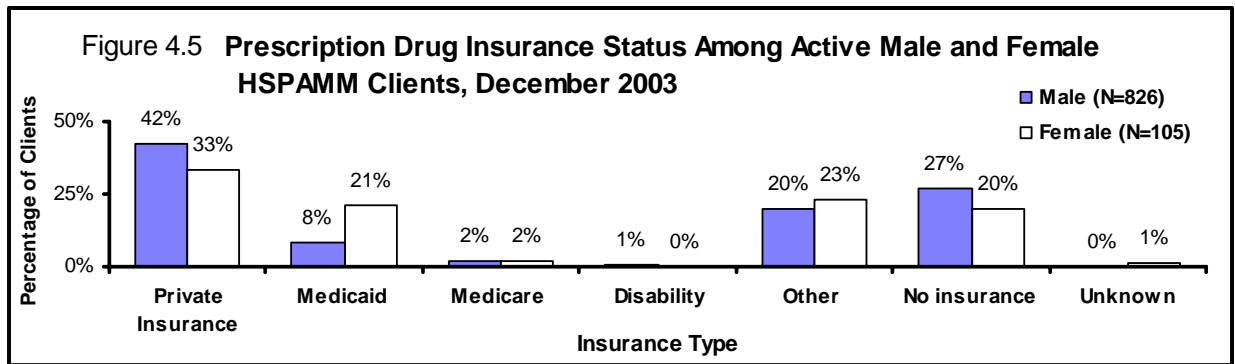
As of December 2003, active HSPAMM participants had some form of medical insurance coverage--43% (388) from private insurance, 9% (88) Medicaid, 7% (65) Medicare, and 29% (218)

other sources. The private insurance was primarily through Kaiser (313, 33%) and HMSA (149, 16%). Twelve percent (12%, 116) of all active participants had no medical insurance coverage. A gender-specific review of the data (Figure 4.4) indicates that less than 10% (10) of females and 13% (106) of males were without insurance. Almost 39% (41) of females and 43% (358) of males are covered by private insurance. Medicaid covers 19% (20) of the females and 8% (68) of males.



Forty-one percent (41%, 382) of active HSPAMM participants had prescription drug insurance coverage through private insurance sources, 10% (91) Medicaid, 2% (18) Medicare and 20% (187) other sources. Twenty percent (20%) of all active participants had no drug coverage as of December 2003. Prescription drug insurance coverage is not as widespread among HSPAMM participants as is medical insurance coverage. This is true for both Medicare (18 vs. 65) and other sources (187 vs. 268). Only Medicaid recipients were more likely to have drug coverage than medical coverage (91 vs. 88). Overall fewer enrollees had drug insurance coverage than medical insurance coverage (12% vs. 20%).

Figure 4.5 details prescription drug insurance coverage by gender. Twenty percent (21) of females and 27% (225) of males did not have drug coverage. Almost 33% (35) of females and



42% (347) of males were covered by private insurance plans. Medicaid coverage was proportionately more common among the females (21%, 22) than males (8%, 69). Medicare coverage was for both males (2%, 16) and females (2%, 2). Twenty percent of males (163) and 23% of females (24) had some other type of drug insurance coverage.

A specified series of laboratory tests are provided with each semi-annual visit for the HSPAMM clients. These include: CD4 levels, liver function and other HIV/related tests. Hepatitis B and C

tests are given to clients at time of enrollment. Table 4.13 shows the laboratory services by county of residence for HSPAMM participants in 2002. A total of 929 lab tests were provided (65%) in Honolulu County, 238 (17%) in

Hawai'i County, 241 (17%) in Maui County, and 28 (2%) in Kaua'i County for active HSPAMM participants. Clients received an average of 1.6 laboratory tests in 2002. Maui residents received the most (almost 1.7) and Kaua'i the least (1.33). The percentage of clients receiving the series of laboratory tests is consistent within each county for both 2001 and 2002.

Table 4.13 Annual Lab Services per HSPAMM Client* Received by County, Hawaii, 2002

County	Active Participants		Lab Tests Received		Avg. Number of labs per Client
Honolulu	603	67%	929	65%	1.54
Hawaii	141	13%	238	17%	1.69
Maui	139	14%	241	17%	1.73
Kauai	21	4%	28	2%	1.33
Total	904	100%	1,436	100%	1.59

*Participants as of Dec 2002

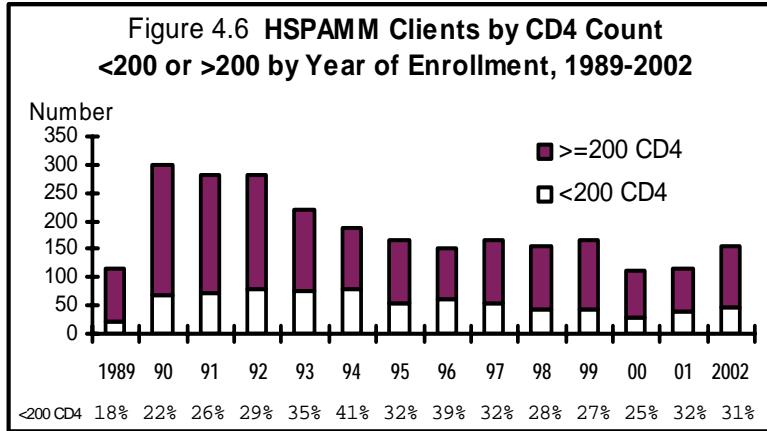
Since the start of the HSPAMM program, 2,330 HSPAMM clients who were potentially susceptible to Hepatitis B infection were screened through the DOH Epidemiology Branch (now called Disease Investigation Branch, Disease Outbreak Control Division). Among these, 2,108 (90%) were male, 183 (8%) were female and 39 (2%) were unspecified gender. A total of 1,497 (65%) had naturally acquired hepatitis B infections.

Approximately 14% (156/1,111) of HSPAMM clients were positive for Hepatitis C. In 2002, newly enrollees were tested for co-infection with HIV and Hepatitis C, yielding a 17.5% (27/154) co-infection rate (Table 4.14). Among these 27 co-infections, 18 were male and 5 were female. Proportionately more females had co-infections than males (25% vs. 14%). This finding is consistent for both 2001 and 2002.

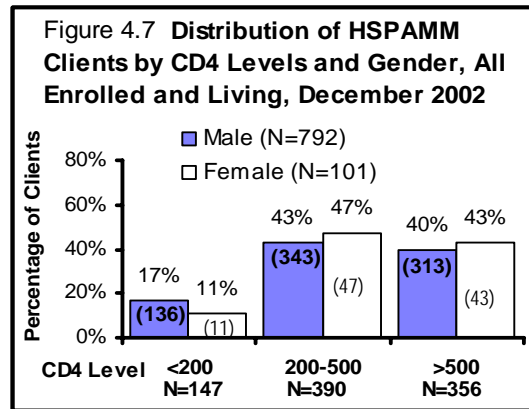
Table 4.14 HSPAMM New Enrollees and Co-infected with HIV and Hepatitis C, 2001-2002

	2001			2002		
	Total HIV +	HIV+ & Hep C	% Co-infection	Total HIV +	HIV+ & Hep C	% Co-infection
Male	110	15	13.6%	132	18	13.6%
Female	7	<4	28.6%	20	5	25.0%
Unknown	0	<4	N/A	N/A	4	N/A
Total	117	19	16.2%	154	27	17.5%

For the current 10 years (1993-2002), an average of 32 % per year of new enrollees had CD4 levels below 200 (range 25% - 41%) (Figure 4.6). It should be noted that CD4 levels below 200 meet the CDC-definition of AIDS. The CD4 level is of clinical importance in monitoring an individual's immune function and for treatment of disease course.



As of December 2002, the vast majority (746/893) of all currently active HSPAMM clients had CD4 levels above 200, 656 (83%) male and 90 (90%) female (Figure 4.7). Male clients had a higher percentage of CD4 levels below 200 than female clients. The reason for this gender difference is unknown.



Appendix I

Highlights and Analysis for Each Chapter

Introduction 1

This document characterizes the HIV/AIDS epidemic in the State of Hawai'i. The main source in this document is AIDS cases diagnosed through December 31, 2001 and reported by September 15, 2003 for Hawai'i residents at the time of diagnosis. HIV surveillance data are not included. The utilization of statewide data from other programs were also reviewed to better understand HIV/AIDS epidemic in Hawaii.

Chapter I. What are the Sociodemographic Characteristics of the General Population in the State of Hawai'i? 7

- The State of Hawai'i has a population that is unique in racial and ethnic diversity. More than one half is Asian/Pacific Islander; more than one fifth is of more than one race.
- The 2000 US Census collected mixed race data for the first time necessitating a redistribution of the different racial/ethnic groups to conform to the categories used in HIV/AIDS surveillance programs (Table 1.2).
- This redistribution also makes comparisons to the 1990 US Census clearer: a slight decrease among Caucasians and a slight increase among Asian/Pacific Islanders (which makes the API total almost two thirds of the state population). Specifically within the Asian/Pacific Islander category, there was a decrease among Hawaiians and an increase among Filipinos and "other API".
- Almost three fourths of the state population lives in Honolulu County on the Island of Oahu. The remaining population lives in three other counties on six other islands. Maui County has the fastest growing population (Table 1.1).
- Overall the ratio of males to females was approximately equal though there was variation within racial and age groups.
- The median age of Hawai'i residents was 36.2 years. Almost one third (30%) of the population was aged 25-44, 22.9% aged 45-64 years, 24% under the age of 18 and 13% over the age of 65.
- More than one fourth of the population over the age of five speaks a language other than English at home. More than four out of five adult residents have a high school education (Table 1.6). One in ten lives below the poverty threshold (Table 1.5) – two in ten if households headed by women are considered. Almost nine out of ten residents have health insurance (Table 1.7).

Chapter II. What is the Scope of the HIV/AIDS Epidemic in the State of Hawai'i? 13

- Cumulative AIDS cases refer to all cases since the beginning of the epidemic in 1983.
- The “current” or “recent” period of analysis refers to 1996-2001. Depending on the number of cases, 1996 is compared with the earlier time period 1983-1995 or it is divided and compared within three two-year periods: 1996-1997, 1998-1999, and 2000-2001.
- A total of 2,681 AIDS cases had been diagnosed by December 31, 2001 and reported by September 15, 2003; 1533 were known to be deceased. (By choosing to total 2001 cases almost 2 years after the reporting period, reporting delays were greatly minimized.)
- As of September 15, 2003, there were 1,246 persons living with AIDS in the State of Hawai'i. As fewer people are dying of AIDS, the number of persons living with AIDS continues to increase.
- As of 2001, 2,600-2,900 HIV/AIDS cases were estimated to be infected. The number also included those unaware of their HIV status. (Made by a calculated estimate; HIV reporting data not available for 2001).
- New cases of AIDS have been diagnosed at a steadily increasing rate since the beginning of the epidemic; peaking in 1993 and decreasing, then leveling off since 1996. It is attributed to therapies made available at that time which reduce the numbers of individuals progressing to AIDS.
- Men represent 93% (2,495) of total cases of AIDS. This percentage dropped to 88% in 1996-2001 as the proportion of female AIDS continued to increase. One in ten newer AIDS cases is now among women. The percentages remained in relatively constant proportion in the three 2-year periods.
- Men who have sex with men (MSM) are still disproportionately represented among newer diagnoses (in 2001-2002), past diagnoses and those living with AIDS. The proportion of AIDS cases attributed to MSM and MSM/IDU has decreased over time.
- Cases associated with injecting drug use (192, 7.2%) or heterosexual contact (140, 5.2%) are still relatively few in number. The proportion of AIDS cases attributed to heterosexual contact has increased.
- The majority of people living with AIDS have MSM as their risk factor (861 cases, 69.1%). The other risk behaviors were 102 (8.2%) IDU, 88 (7.1%) Heterosexual contact and 87 (7.0%) MSM/IDU.
- In 2000-2001, 221 AIDS cases were diagnosed. Of these, 56% (124) were Caucasians; 31% (69) APIs (including Hawaiian/PI); 16% (36) Hawaiians; 5% (12) Hispanics; 5% (11) African Americans and 2% others.
- The diagnosed AIDS rate in 2000-2001 combined, was the highest for African Americans (38.7 per 100,000). The rate was slightly higher than the rates for Hawaiians (34.7) and Caucasians (32.6), two times higher than the state average (18.2), nearly 3 times higher than Hispanics and over 4 times higher than for combined API.
- Caucasians continue to represent most of the new diagnoses and most of those living with AIDS. Combined Asian and Pacific Islanders accounted for the next largest number for both new diagnoses and those living with AIDS. The highest rate of AIDS

diagnoses was among African Americans though the relative numbers were low and followed by Hawaiians.

- 24% of persons living with AIDS and 40.3% of persons with deaths attributable to AIDS in 1996-2001 were API.
- Persons living with AIDS were: 1,128 (90.5%) male and 118 (9.5%) female; 773 (62%) Caucasians, 309 (24.8%) APIs combined, 123 (9.9%) Hawaiians, 70 (5.6%) Filipinos, 45 (3.6%) Japanese, 26 (2.1%) Chinese, 45 (3.6%) other APIs were combined, 83 (6.7%) Hispanics, 69 (5.5%) African-Americans and 12 (1.0%) other.
- Most persons living with AIDS (963, 77.2%) had a current age of 35-54 years old (as of September 15, 2003) and 0.5% was under the age of 25.
- As of September 15, 2003, Honolulu County had the highest number and percentage of AIDS cases (823 cases, 66.1%), followed by Hawai'i County (199 cases, 16.0%), Maui County (174 cases, 14.0%), and Kaua'i County (50 cases, 4.0%, Table 2.10).
- Almost three-fourths of cases of AIDS are diagnosed among Oahu residents where a similar percentage of people living with AIDS are located. The number of diagnoses relative to county population size is highest in Maui which had particularly high rates in 2000-2001.
- In 2000-2001, Honolulu County had most of the new AIDS diagnoses (147, 67%). Maui County had the highest rate of cases, 29.6 per 100,000 residents.
- Maui County had the highest prevalence rate (135.7 per 100,000).
- Overall, Maui County experienced an increase in the AIDS incidence rate during the current 6-year period, while Honolulu, Hawai'i, and Kaua'i Counties showed a decrease in the AIDS incidence rate.

Chapter III. How does HIV/AIDS Infection Affect Various Populations in the State of Hawai'i? 31

Men Who Have Sex with Men (MSM) 32

- From 1996 to 2001, the highest numbers (497, 66%) and percentage of AIDS in Hawai'i are in MSM.
- Caucasians comprise 61% (303) of Hawai'i MSM AIDS cases.
- The number of MSM AIDS cases among Caucasians decreased from 1996-1997 to 2000-2001; among Hawaiians, it slightly increased.
- AIDS cases were diagnosed at later ages in 2000-2001 than the beginning of the epidemic (1983).
- Honolulu County accounted for 68% (337) of the MSM AIDS cases, followed by Maui County (18%, 86), Hawaii County (10%, 54) and Kauai County (4%, 20) in 1996-2001.
- The number of MSM Syphilis cases has increased and HIV/Syphilis co-infection has increased as well from 2001 to 2003.

Injection Drug Users (IDU)..... 34

- A total of 192 cases (7%) in 1983-2001 were diagnosed as IDU risk behavior. Sixty seven cases (9%) were diagnosed from 1996 to 2001

- There were 134 (70%) male and 58 (30%) female AIDS cases associated with IDU in 1983-2001.
- Honolulu County accounted for 67% (45) of the IDU AIDS cases, followed by Hawaii County (15%, 10), Maui County (10%, 7,) and Kauai County (8%, 5) in 1996-2001.
- IDU AIDS cases in Hawai`i comprise a much smaller percentage (7.2%) of total AIDS cases than is observed nationally.
- Injection drug use is a more common route of HIV/AIDS transmission for females than males.
- A total of sixteen percent (16%, 434) of AIDS cases were diagnosed since 1983 as injection drug risk behavior.

Men Who Have Sex with Men and Inject Drugs 39

- A total of 181 (7%) cumulative AIDS cases were attributed to the MSM/IDU risk behavior group. Of these, 41 were diagnosed in 1996-2001.
- The proportion of AIDS cases attributed to MSM/IDU has decreased over time.
- Honolulu County accounted for 71% (29) of the MSM/IDU AIDS cases, followed by Hawai`i County (15%, 6) and Maui County (12%, 5) in 1996-2001.
- 81% of Hawai`i's AIDS cases have been reported in the combined risk behavior groups of MSM/IDU and MSM.

Persons at Risk for HIV/AIDS Through Heterosexual Contact 40

- Heterosexual HIV transmission is becoming more common. Since 1983, 140 (5%) of all AIDS cases have been associated with heterosexual contact; 69 (49%) of them were diagnosed between 1996 and 2001.
- The proportion of AIDS cases attributed to heterosexual contact has increased over time, but they are still relatively few in number.
- More cases of AIDS are attributed to heterosexual contact among females (94) than males (46).
- Heterosexual contact is the most frequent exposure noted among female AIDS cases (54%).
- Asians and Pacific Islanders have the highest number of cases with heterosexual contact as their mode of exposure to HIV/AIDS.
- Heterosexual AIDS cases are diagnosed at an earlier age than other modes of transmission AIDS cases (40.7% vs. 33.7% in below aged 35 years).
- Honolulu County accounted for 64% (44) of the heterosexual contact AIDS cases, followed by Hawaii County (23%, 16) and Maui County (12%, 8) in 1996-2001.

HIV/AIDS in Women and Children..... 46

- A cumulative total of 186 (7.2%) female AIDS cases have been diagnosed since the beginning of the epidemic. Of those, 89 were diagnosed between 1996 and 2001.
- The proportion of AIDS cases among females has increased from 5% before 1996 to 12% in the 1996 - 2001 period, but remained in a relatively constant proportion to the three 2-year periods.
- Almost half (84, 45%) of the total female AIDS cases are API.

- For Hawaiian/part-Hawaiians and Filipinos, the proportion of total female AIDS cases is nearly twice that of males.
- Asians and Pacific Islanders had the highest number of cases with heterosexual contact as their mode of exposure to HIV/AIDS.
- Heterosexual contact and injection drug use are the two major risk behaviors among female AIDS cases.
- A higher proportion (18%) of females was diagnosed between the ages of 20 and 29 years of age than males (6%) in the 1996-2001 time period.
- Honolulu County had 58 (65%) female AIDS cases; Hawaii County 20 (23%); Maui County 8 (9%); and Kauai County <4 female AIDS cases (3%) in 1996-2001.
- Perinatal cases have averaged less than one per year throughout the epidemic.

Transgender (TG) at Risk 49

- During 2002, out of a total of 8,550 publicly funded HIV antibody tests administered statewide, 122 HIV antibody tests were administered to transgenders at risk. There were fewer than 4 positive results.

HIV/AIDS in Adolescents /Young Adults 49

- There were ten AIDS cases among adolescents (13-19 years old) and 64 cases among young adults (20-24 years old) in Hawai'i between 1983 and 2001.
- Nine out of 10 of adolescent AIDS cases (90%) were Asians and Pacific Islanders.
- The young adult AIDS cases associated with MSM (42, 56.8%); MSM/IDU (8, 10.8%); heterosexual contact (7, 9.5%); hemophilia (6, 8.1%); and IDU (5, 6.8%).

HIV/ AIDS in Caucasians 51

- Caucasians account for 63.4 % (1,700) of the total AIDS cases through 2001.
- Caucasians comprise 31% of Hawai'i's population but 63% of all AIDS cases between 1983 and 2001.
- In 2000-2001, the rate for Caucasian was 32.6 per 100,000 population, which is higher than the state average (18.2 per 100,000)
- Caucasian males account for 78% of all MSM AIDS cases in Hawai'i.
- The relative number of AIDS cases among Caucasians has decreased in the (1996-2001) time period.
- A total of 264 (61%) Caucasian AIDS cases from Honolulu County; 78 (18%) Maui County; 63 (15%) Hawaii County; and 29 (7%) Kauai County.

HIV/AIDS in Asian and Pacific Islander Ethnic Groups 52

- Asian and Pacific Islanders have the second highest number (712) and percentage (26.6%) of AIDS cases between 1983 and 2001.
- The rate for API in 2000-2001 was 8.6 per 100,000 population, which is less than half of the state average rate (18.2) and approximately one quarter less than the Caucasian rate (32.6) and African American rate (38.7).

- Asian and Pacific Islander cases of AIDS are 17% female, the highest percentage female of any race/ethnicity for the 1996-2001 time period. Most of these females have heterosexual contact as their risk factor.
- A total of 251 (64%) API AIDS cases from Honolulu County; 64 (16%) Maui County; 55 (14%) Hawaii County; and 21 (5%) Kauai County.

HIV/AIDS in Hawaiians and Part-Hawaiians 55

- Hawaiian/Part-Hawaiians had the third largest number of total AIDS cases (285, 10.7%) between 1983 and 2001. (This represents 40% of total API AIDS cases.)
- Hawaiians had the second highest rate of AIDS cases (34.7 per 100,000 population) in Hawai'i in 2000-2001, almost twice the state's overall rate of 18.2 per 100,000.
- Hawaiians accounted for 19.4% of female AIDS cases in the state.
- A larger percentage of Hawaiians as compared with non-Hawaiians were diagnosed before the age of 35.
- Most Hawaiian AIDS cases live in Honolulu County. The number and proportion continues to increase in Maui County.
- The percentage of female Hawaiian AIDS cases doubled between 1996 and 2001. Most had heterosexual contact as their risk factor.

HIV/AIDS in Filipinos 56

- Filipinos represent 18 % of the state's population and have had 5.3 % (141/2681) of the diagnosed AIDS cases as of December 2001.
- Filipinos are the third largest population group in the state but are the fourth largest group among AIDS cases.
- In 2000-2001, the rate for Filipinos was 8.2 per 100,000 population, which is less than half the state average (18.2 per 100,000).

HIV/AIDS in Hispanics 57

- Hispanics are the fifth largest racial/ethnic group among AIDS cases (138, 5.1%).
- The proportion of Hispanic AIDS cases (5.1%) is lower than their proportion in the state population (7.2%).
- In 2000-2001, the rate for Hispanic AIDS was 13.7 cases per 100,000 population, which is lower than the overall state rate (18.2 cases per 100,000).
- Injecting drug use (IDU) is a risk factor for 16% of Hispanic AIDS cases.

HIV/AIDS in African-Americans 58

- The proportion of AIDS cases (114, 4.3%) among African Americans is higher than their proportion in the state population (2.3%).
- In 2000-2001, the rate for African-Americans was 38.7 per 100,000 population, which is more than double the overall state rate (18.2 per 100,000). It is the highest rate in the state for any race/ethnicity though the numbers were relatively low.
- Injecting drug use (IDU) as a risk factor has significantly increased to 24% in African American AIDS cases between 1996 and 2001.

- The proportion of female AIDS cases is higher among African Americans (21.6%) than any other racial/ethnic group for 1996-2001.

HIV Testing in the General Population and in Special Populations.. 59

Counseling and Testing, Pregnant Women, Military Applicants, Custody Population, BRFSS

- As of December 2002, there have been a total of 180,438 anonymous and confidential HIV tests performed in HIV Counseling and Testing (C &T) sites statewide since the program's inception in 1985. In 2002, the number of HIV tests conducted was 8,552, yielding 0.6% positive rate.
- In 2001, 72.7% individuals with negative test results returned for their results through the C&T Program. It had a similar return rate in 2002. The return rates for HIV positive test results ranged from 61.9% in 2001 to 87.5% in 2002.
- From mid-1997 to 2002, two of every 10,000 pregnant women tested positive during prenatal screening. 106,149 HIV tests were performed on pregnant women, yielding a positive rate of 0.02%.
- From 1996-2002 none of 5,000 Hawai'i military applicants tested positive.
- During 2001, 0.3 per 100,000 of the prison and jail custody population tested positive.
- During 2001, 40% of adults surveyed in the Behavioral Risk Factors Surveillance System (BRFSS) indicated that they had an HIV test. 44% said they were tested in a private physician's office during a routine check-up.

Data on Related Diseases and Programs --Hepatitis C 65

- As of December 2002, a total of 6,946 positive hepatitis C cases were reported in Hawaii. This number is under reported.

Chapter IV. What are the Patterns of Utilization of HIV/AIDS Care Services for the Persons in the State of Hawai'i? 66

- This section utilizes the epidemic specific information of Chapter II and III and program-specific data to clarify needs and utilization patterns for HIV/AIDS care planning groups (CPG's). Both HRSA-funded and non-HRSA-funded are examined for completeness of HIV care in Hawai'i.
- Clients are able to receive multiple services from multiple programs. Duplication of client data is possible between similarly-funded programs.
- In 2001, Ryan White Title II Awards funded 1,527 clients through: Hawai'i's AIDS Drug Assistance Program (HDAP, 295 clients), the Hawai'i Insurance Continuation Program (H-COBRA, 39 clients), Life Foundation (289 clients), West Hawai'i AIDS Foundation (74 clients), Big Island AIDS Project (61 clients), Maui AIDS Foundation (111 clients), Malama Pono (38 clients), Waikiki Health Clinic (150 clients), Gregory House (119 clients) and Save the Food Basket (351 clients).

- Services provided to Title II clients in 2001 were primarily medical care (518), dental care (328), mental health and counseling (76), food bank/home delivered meals (538), and housing assistance (248). The case management services (1,270) were funded by the state fund.
- The Hawai'i's AIDS Drug Assistance Program served 158 clients who received a total of 624 prescriptions during the month of June 2002.
- Hawai'i Insurance Continuation Program insured 39 clients for an average of 8.3 months per client at a cost of \$83,913 during 2001.
- Recipients through AIDS Service Organizations in 2001 were primarily males (86.0%), Caucasians (52.7%) or API (30.1%) and aged 25-44 (53.3%). The proportions of these Caucasians and APIs are less as compared with persons living with AIDS during 2001. There was no duplication of numbers within Federal Programs, but it exists between programs.
- A total of 1,001 clients received services at the following AIDS Service Organizations statewide during 2002 (Table 4.6): Life Foundation (624), Maui AIDS Foundation (154), Big Island AIDS Project (101), West Hawai'i AIDS Foundation (77), and Malama Pono (45).
- A total of 265 clients utilized Title III CARE Act Services at the Waikiki Health Center and the Community Clinic of Maui during 2002 (Tables 4.7-4.8). Almost half of the Title III recipients had AIDS. Slightly more than half received highly active anti-retroviral therapies. Almost half of the clients lived below the Federal poverty level; almost one in three (30.6%) were without medical insurance.
- In 2002, 885 clients received State-funded support services from the Hawai'i Seropositivity and Medical Management Program (HSPAMM) open to anyone who is HIV+. One third of the new HSPAMM clients enrolling each year between 1993 and 2002 resided in Hawai'i less than 2 years (Figure 4.2); nearly one third of the clients had CD4 levels below 200 (Figure 4.6).; nearly one third of the clients were enrolled in HSPAMM within one year of their first HIV positive test in 2001-2002 (Table 4.11).

Appendix II

Health Education/Risk Reduction (HERR)

Community-based organizations (CBOs) throughout the state provide health education/risk reduction (HERR) HIV prevention interventions to three groups at risk for HIV infection—MSM, transgenders (TG) at risk for HIV infection, and women at risk for HIV infection. These interventions are funded by both state and federal funds. In 2002, DOH funded interventions at six CBO throughout the state: Life Foundation, Big Island AIDS Project, West AIDS Foundation, Malama Pono, Maui AIDS Foundation, and Ke Ola Mamo. Hawaii Community Health Out-reach Work (CHOW) provides clean syringes to injection drug users to prevent HIV/AIDS through IDU.

In 2002, the three primary types of HERR interventions provided to clients included individual-level interventions (ILI), group-level interventions (GLI), and outreach. Individual-level interventions aim to change an individual's behavior through one-on-one risk reduction interactions that include risk reduction counseling and skills building. ILI is a multiple session intervention with each session lasting between 30 and 90 minutes. Group-level interventions aim to change individuals' behaviors through risk reduction interactions in group settings. In group level interventions interaction takes place not only between individual participants and the health educator, but also *among* participants. Like individual level interventions, group level interventions include a skills building component. Outreach interventions are conducted by peers or paid staff with high risk individuals in areas where the clients typically congregate. Outreach usually involves distributing risk reduction materials such as condoms, safer sex kits, and safer injecting supplies, and providing risk reduction information on HIV and STDs, providing brief harm reduction-based counseling, and providing linkages to services.

All three interventions were provided to the three risk groups mentioned above. In 2002, there were 449 unduplicated MSM clients in ILI, approximately 250 unduplicated MSM GLI clients, and 10,588 duplicated MSM outreach contacts. In 2002, there were 212 unduplicated women at risk clients in ILI and approximately 700 unduplicated women at risk GLI clients. In 2002, there were 199 unduplicated transgender at risk clients in ILI and approximately 175 unduplicated transgenders at risk GLI clients. There were 6,731 outreach contacts for both women at risk and transgenders at risk in 2002. Successful completion of ILI (e.g., completing at least three sessions) was approximately 30% for all three risk groups.

Appendix III

Abbreviations Used

>	Greater than
≥	Greater than or equal to
<	Less than
≤	Less than or equal to
Afr.-Amer.	African Americans
AIDS	Acquired immune deficiency syndrome
API	Asians and Pacific Islanders
Asian and PI	Asians and Pacific Islanders
ASO	AIDS Service Organizations
BIAP	Big Island AIDS Project - Now combined with WHAF and called Hawai'i Island HIV/AIDS Foundation
BRFSS	Behavioral Risk Factors Surveillance System
CARE Act	HRSA program of primary care and support services for individuals living with HIV disease
CDC	Centers for Disease Control and Prevention
Co.	County
CBO	Community Based Organization
CPG	Community Planning Group
CTS	Counseling and Testing System
DOH	Hawai'i Department of Health
GLI	Group level interventions
HAART	Highly Active Antiretroviral Therapy

HARS	HIV/AIDS Reporting System
Haw. /Pt. Haw.	Native Hawaiians and Part-Hawaiians
Hetsx.	Heterosexual contact
HI	Hawai'i
HIV	Human immunodeficiency virus
HIV+	Having a positive blood test for HIV (serologic evidence).
H-COBRA	Hawai'i Insurance Continuation Program
HDAP	Hawai'i AIDS Drug Assistance Program
HRSA	Health Resources and Services Administration
HERR	Health Education/Risk Reduction
HSPAMM	Hawai'i Seropositivity and Medical Management Program
IDU	Injection drug user
ILI	Individual level interventions
MSM	Men who have sex with men
MSM/IDU	Men who have sex with men <u>and</u> inject drugs
SAPB	STD/AIDS Prevention Branch of the Hawai'i Department of Health
STD	Sexually transmitted disease
TB	Tuberculosis
TG	Transgender
WHAF	West Hawai'i AIDS Foundation - Now combined with BIAP and called Hawai'i Island HIV/AIDS Foundation
YRBSS	Youth Risk Behavior Surveillance System

Appendix IV

Definitions - "Epidemiology 101"³⁹

AIDS - Acquired immunodeficiency syndrome characterized by severe HIV-related immunosuppression and associated conditions which include life-threatening illness.

AIDS Service Organizations – A Ryan White Title II Program that contracts with organizations to provide services for individuals with AIDS including medical, dental, mental health services, transportation assistance, financial assistance, etc.

Anonymous testing - HIV testing conducted without identifiers so no one can link a person's name with a test result.

Confidential HIV testing - HIV testing linked to a person's name, which is kept confidential under state/local laws, assuring confidentiality to prevent potential for disclosure or discrimination, and to protect the patient's rights to privacy.

Epidemiology - The study of the patterns and determinants of health and disease in populations. Epidemiology is the science that underlies the public health practice of disease prevention and control. Epidemiologists seek to define the occurrence of disease in terms of person, place, and time, such as:

- who is affected; what is the pattern of disease in affected persons; what groups are at greatest risk?
- what are the exposures or behaviors that place individuals at risk for disease?
- where are diseases occurring; where are the events occurring that place individuals at risk for disease?
- when are diseases occurring; what are the trends?

An example would be a description of what populations, age groups and ethnic groups are affected by HIV/AIDS in a defined area, such as a state.

HIV - Human immunodeficiency virus, the causative agent of AIDS. An individual may be infected with HIV for several years before developing the symptoms or conditions associated with an AIDS diagnosis. In other words, a person may be HIV infected (or HIV positive), but not have AIDS.

Incidence - The number of **new** cases of a disease or condition that occur in a specified population during a specified period of time. Often incidence is expressed annually, e.g., the number of AIDS cases diagnosed in the United States in 2001.

Incidence rate - The number of **new** cases that occur in a specified population during a specified period of time divided by the population at risk, often expressed as an annual incidence per 100,000 population.

³⁹National Alliance of State and Territorial AIDS Directors, HIV Prevention Community Planning Bulletin, January 1997, 9-10.

Prevalence - The number of persons in a specified population living with a disease or condition at a specific point in or period of time. (For example, the number of people living with AIDS in the U.S. in 2000).

Prevalence rate - The number of persons in a specified population **living** with a disease or condition at a specific point in or period of time divided by the population at risk, sometimes expressed as percent.

Proportional allocation – A statistical method that converts the 2000 US Census population category of “multiple race” into the “single race” acquisition method used during the 1990 US Census. Significant because all data during this report period was collected using the 1990 methodology.

Seroepidemiology - Epidemiologic study or activity based on the serologic detection of specific antigens or antibodies. Seroepidemiology tracks patterns in HIV disease based on serologic evidence of HIV infection. A serologic test is a test performed on blood serum.

Seroincidence - The number of **new** infections identified serologically (through blood tests) in a specified population during a specified period of time. (For example, the number or rate of new HIV or AIDS cases in a particular period of time).

Seroprevalence - The number of persons in a specified population who have serologic evidence of a disease at a specific point in or period of time. An example of seroprevalence would be the long-term rate or percentage of people infected with HIV in a defined population.

Serosurveillance - Ongoing, systematic collection, analysis, interpretation, and timely dissemination of **serologic** data. For example, standardized HIV seroprevalence surveys are conducted in designated subgroups of the population nationwide, as part of a surveillance system to monitor the HIV epidemic in the U. S.

Surveillance - The ongoing, systematic collection, analysis, and interpretation of outcome specific data, closely integrated with the timely dissemination of these data to those responsible for preventing and controlling disease or injury (REF: Thacker SB, Berkelman RL. Public Health Surveillance in the United States. Epidemiol Rev 1988;10:164-190). For example, AIDS case data are reported to CDC from state and local health departments and are analyzed to get a picture of the trends in the HIV epidemic in states and nationwide.

Title I (CARE Act). Provides formula and supplemental grants to EMAs that are disproportionately affected by the HIV epidemic.

Title II (CARE Act). Provides formula grants to states, the District of Columbia, Puerto Rico, and eligible US territories to improve the quality, availability, and organization of health care and support services for people living with HIV and their families.

Appendix V

Proportional Allocation Methodology:

The 2000 Census asked respondents to "select one or more" race groups and separated the Native Hawaiian and other Pacific Islanders group from the Asian group, resulting in a total of 31 different classifications.

Through December 2002, the racial data collected for HIV/AIDS Surveillance in Hawai'i were in the pre-2000 census format. That data were collected to allow selection of only one racial classification (White-non Hispanic, Black-non Hispanic, Hispanic, American Indian or Alaska native, and Asian or Pacific Islander including subgroups: Hawaiian, Filipinos, and Japanese, etc.) Beginning in 2003, the racial data for HIV/AIDS in Hawai'i are collected using the new racial categories as follows: White, Black or African American, American Indian or Alaska native, Hawaiian or other Pacific Islander. Asian now includes subgroups-Filipinos, and Japanese, etc, as well as a multiple-race category. Two ethnicity categories are now collected independent of race: Hispanic and non-Hispanic.

The proportional allocation method takes the new 2000 U.S. Census data and allocates it to the old racial/ethnic collection categories (used by the AIDS Surveillance program) by comparing it with 1990 Census data. This creates new population estimates for which new race/ethnicity disease rates can be calculated.

Race	1990 Population		2000 Population		2000 Population-Adjusted	
	No.	%	No.	%	No.	%
Caucasian	369,616	33.4	294,102	24.3	380,254	31.4
African Am	27,195	2.5	22,003	1.8	28,448	2.3
Am Ind./ Alaska Native	5,099	0.5	3,535	0.3	4,571	0.4
Asian or Pac Is	685,236	61.8	617,407	51.0	798,264	65.9
Japanese	247,486	22.3	201,764	16.7	260,867	21.5
Filipino	168,682	15.2	170,635	14.1	220,619	18.2
Hawaiian	138,742	12.5	80,137	6.6	103,612	8.6
Chinese	68,804	6.2	56,600	4.7	73,180	6.0
Korean	24,454	2.2	23,537	1.9	30,432	2.5
Samoan	15,034	1.4	16,166	1.3	20,902	1.7
Vietnamese	5,468	0.5	7,867	0.6	10,171	0.8
Other API	16,566	1.5	59,260		76,619	6.3
Other Race	21,083	1.9	15,147	1.3	NA	NA
Hispanic Origin	81,390	7.3	87,699	7.2	87,699	NA
Two or more races	NA	NA	259,343	21.4	NA	NA

* Other Asian Pacific Islander includes Other Asian, Other Pacific Islander, Guamanian, and Asian Indian.

Reference:

Centers for Disease Control and Prevention and Health Resources and Services Administration. Integrated Guidelines for Developing Epidemiologic Profiles: HIV Prevention and Ryan White CARE Act Community Planning. Atlanta, Georgia: Centers for Disease Control and Prevention; 2004. Page 57. <http://www.cdc.gov/hiv/pubs/guidelines.htm>

The proportional allocation method calculates the proportional contribution of each group of interest to the total non-Hispanic 2000 census population count in the state. The proportional contribution is then applied to the HIV/AIDS reporting system race/ethnicity categories. Using this method can minimize differences between groups but it does not provide actual population numbers required for calculating disease rates.

Example: In the 2000 Census, assume that a given age/sex group encompasses a non-Hispanic population of 5,000. Among these, 50 are “other race” or “two or more races” and 4,950 are in one of the groups with only one race. For each “one race” category in the given age/sex group, its proportion of the total “one race” count for that group is computed. Each proportion is then multiplied by the count of 50 and added to the corresponding “one race” count for that age/sex group. This technique is applied separately to each of the 3,141 counties to produce an adjusted count. This adjusted count thus is computed for each sex/age group for each race in each county. For the “Hispanic regardless of race” category, the Hispanic ethnicity counts in each age/sex group are summed across all the racial groups.

Applying to this methodology by using the 1990 Census, the redistribution of the 2000 Census racial proportions population are shown as following:

Appendix VI

Definitions of Risk Group - HIV/AIDS Surveillance Program

Male Homosexual/Bisexual (MSM): Any male who self-identifies as being in this group or any male who has had sex with a man since 1978.

Male Homosexual/Bisexual IV Drug User (MSM/IDU): Any male who self-identifies as being a homosexual or who has had sex with another man since 1978 and who has received an intravenous injection with a needle and syringe of a nonprescription drug or substance since 1978.

IV Drug User (IDU): Any person who has received an intravenous injection with a needle and syringe of a nonprescription drug or substance since 1978.

Persons with Hemophilia: Any person who has a hereditary bleeding disorder (i.e. hemophilia or other coagulation disorder) requiring therapy with a clotting factor or other blood product.

Blood Recipient: Any person who received an injection of whole blood or blood product directly into the blood stream between 1978 and 1985. Persons receiving immune globulin preparations during this period are not included.

Heterosexual: Heterosexuals with a known risk exposure: Female sex partners of bisexuals, sex partners of persons with AIDS/+HIV, sex partners of IV drug users, sex partners of persons with hemophilia, persons involved in exchange of money/drugs for sex, other. Heterosexual is defined as a male who has only had sex with women, or a woman who has only had sex with men.

Other: Persons who do not fit into one of the above mentioned groups and includes persons with no known risk exposure to HIV infection.

Unknown: Any person who has been tested for HIV antibodies whose risk of exposure is unknown for any reason (i.e. client's risk not determined at time of interview).