
DO
RIGHT
MY
YOU
BE
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SONG
WONT
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KNOW
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CHARCOAL
BROILER
ITALIAN
FOOD
AT IT'S BEST
COCKTAIL
LOUNGE

Purpose

The purpose of this chapter is to present the epidemiology of the HIV and AIDS epidemic in San Francisco. In other words, this chapter paints a picture of HIV and AIDS in San Francisco.

The HIV and AIDS data is presented for several demographic and risk populations. AIDS data tells the story of HIV transmission several years ago; this data is included because it is the most complete data we have related to the epidemic, and it gives us some information about who is affected by HIV. HIV data, estimates, and indicators tell the story of current patterns in HIV infection. Unlike AIDS data, HIV data is not based on case reporting and is therefore less complete. Both types of data are needed to get a full picture of the epidemic.

The information in this chapter represents the scientific evidence upon which San Francisco's HIV prevention priorities are based. Specifically, the funding priorities are based on the estimates of HIV incidence presented in Exhibit 33, as well as prevalence, incidence, and behavioral data for specific populations. For more information on the funding priorities, see Chapter 4: Priority-Setting (pp. 137-156). For more detailed needs of various populations, as well as additional data on cofactors related to HIV such as drug use or homelessness, see Chapter 3: Community Assessment (pp. 45-136).

How to Read This Chapter

Those who are interested in learning about the overall picture of the epidemic are invited to read the whole chapter. To understand the disproportionate effects of AIDS on various demographic groups, focus on Section III. For recent trends in HIV, focus on Section IV.

Those who wish to obtain epidemiologic information about a specific population have two options:

1) Determine how your population is defined and turn to the corresponding pages:
- Gender (p. 20)
- Race/ethnicity (pp. 21-24)
- Age (p. 25)
- Behavioral risk population (BRP; p. 26, pp. 29-38)

2) Use the index at the back of the Plan to find your population and locate epidemiologic information.

Although the information in this chapter represents the best available, researchers have not thoroughly investigated all aspects of the local HIV epidemic. For example, there is less research available regarding women and HIV in San Francisco compared with gay men. Therefore, data should be interpreted with caution. Additional data limitations are presented in Appendix 1.

Terms and Definitions

Disproportionately Represented — A population group, such as a racial/ethnic group, makes up a higher percentage of people living with HIV or AIDS compared with their percentage in the overall population.

Endemic — A disease persists in a community, without substantially increasing or decreasing over time.

Epidemic — The spread of disease is increasing.

Epidemiology — The scientific study of disease distribution and the factors that cause diseases to spread in communities.

HIV Incidence — Refers to new HIV infections. Incidence can be expressed as the number of new infections in a year, or as the percentage of uninfected individuals who will become infected in a year.

HIV Indicators — Diseases or conditions known to follow or precede the pattern of the HIV epidemic. Indicators can be used (in some cases) to predict trends in HIV infection, and they can also serve as markers of risk behaviors that are known to be associated with HIV infection.

HIV Prevalence — Refers to people living with HIV, including people living with AIDS, at any given point in time. Prevalence can be expressed as the number of HIV-positive people, but is more often expressed as the percentage of people who are HIV-positive within a given population.

Under-represented — A population group, such as a racial/ethnic group, makes up a lower percentage of people living with HIV or AIDS compared with their percentage in the overall population.

Chapter Outline

I. Overview of San Francisco and Its HIV/AIDS Epidemic
Gives a narrative summary of the City and County of San Francisco and its HIV/AIDS epidemic.

II. Demographics and AIDS Statistics
Describes people living with AIDS by demographics (gender, race/ethnicity, age, and neighborhood of residence) and behavioral risk populations.

III. HIV Prevalence and Incidence
Presents the latest information on trends in HIV infections, including HIV Consensus Meeting conclusions, counseling and testing data, and HIV indicator data.

Appendix 1: Types of Information Used in the Epidemiologic Profile and Strengths and Limitations

Appendix 2: Recent AIDS Cases (1999-2002)

The City and County of San Francisco: An Overview

San Francisco is the fourth largest city in the state of California and the thirteenth largest in the nation, with approximately 791,600 residents as of 2002. San Francisco is also a county, and it is one of the most densely populated areas in California, with over 17,000 persons per square mile. San Francisco has a total area of 46.4 square miles, including 43 hills and 30 miles of shoreline. The city sits at the northern tip of a peninsula that divides the Pacific Ocean and the San Francisco Bay. San Francisco County is one of nine counties that comprise the San Francisco Bay Area, which is the fifth largest metropolitan region in the U.S. San Francisco is also one of the cities most frequently visited by domestic and international tourists (over 4 million visited the city in 1999). San Francisco has a primarily service-based economy, although there is a manufacturing industry.

The city is well known for its diverse and multicultural population. Over half of the city's residents are people of color, over one third are immigrants to the U.S., and there is a large lesbian/gay/bisexual/transgender community. It is also home to some of the most and least privileged socioeconomic groups, with over one third of households making $75,000 or more per year and 11% living in poverty. One of the distinguishing characteristics of San Francisco is its progressive thinking and social policies. As such, it attracts people from all different backgrounds and walks of life. Many homeless individuals, sex workers, transgendered persons, and other groups who have experienced discrimination make their home in the city. HIV affects people from all these communities – both high-income and low-income individuals are affected, as are both people of color and white individuals.

The HIV epidemic is not concentrated only among the poor and underserved, as in other parts of the country. This is because the factors that affect HIV risk in San Francisco affect people from all socioeconomic backgrounds. For example, homelessness affects mostly low-income individuals, but substance use (which has been identified as a key factor in the increases in new HIV infections) affects people of low and high socioeconomic status. To a greater extent than most cities, San Francisco's epidemic primarily affects gay men and male-to-female (MTF) transgendered persons.

San Francisco has undergone dramatic changes in its population in the last five years. From 1999 to 2001, San Francisco and the Bay Area experienced an economic boom attributable to the fast-growing high tech sector. Thousands moved to San Francisco for employment. A housing shortage ensued, housing costs soared, and many long-time San Francisco residents were forced to leave San Francisco in search of affordable housing in other Bay Area counties or elsewhere in the country. In early 2001, the economy began to contract. Layoffs and rising unemployment characterized 2002 and 2003. Some of those who came here for high tech jobs have left the city. Housing costs have dipped substantially in several neighborhoods but still remain unaffordable for many. Further, the concurrent nationwide economic downturn has begun to affect the availability of human and social services due to budget cuts at the city, state, and federal levels. All of these population shifts have undoubtedly affected HIV transmission patterns, although no studies have explored this issue specifically. With people moving in and out of San Francisco frequently, it is challenging to ensure that HIV prevention messages are reaching everyone at risk.

In summary, San Francisco's unique character sets the stage for an HIV/AIDS epidemic that is different from the national profile.

HIV and AIDS in San Francisco: An Overview

San Francisco has had 28,624 people diagnosed with AIDS since the beginning of the epidemic, the third largest number after New York City and Los Angeles. Compared with national trends, San Francisco's epidemic affects a smaller proportion of heterosexuals, injection drug users (IDUs), and people of color, although these groups are still affected. Historically, San Francisco's HIV epidemic has been largely among gay men, and in the early years prior to needle exchange, among IDUs as well. Between the early 1980s (when the peak in new HIV infections occurred) and the late 1990s, new HIV infections declined dramatically, due to mobilization and prevention efforts among gay men and IDUs.

In the late 1990s, the epidemic began to change. New infections among gay men began to increase, and a high HIV prevalence was documented among MTF transgendered persons. The causes of these increases in new infections are numerous and complex. Highly active antiretroviral therapy (HAART) has led to individuals living longer, feeling healthier, and, as a result, being more sexually active. Increases in recreational drug use have been associated with increases in high-risk sexual behavior, particularly among men who have sex with men (MSM). Increases in sexually transmitted disease (STD) rates have affected HIV incidence because some STDs can facilitate HIV transmission. Unmet mental health and substance use treatment needs and economic insecurity are also contributing factors, especially among MTF transgendered persons. In summary, there continues to be an epidemic among MSM (particularly gay men) and MTF transgendered persons in 2004 in San Francisco. Some data suggests that new infection rates among MSM may be leveling off, but it is too soon to make any definitive conclusions.

In addition to reducing the overall number of new HIV infections in the city by focusing on populations with the highest numbers of new infections (gay men and MTF persons), San Francisco's HIV prevention strategy also involves addressing the disproportionate effects of HIV and AIDS. As in most communities, HIV and AIDS are not distributed evenly across all populations. In San Francisco, the populations disproportionately affected compared with their numbers in the populations include African Americans, whites, and adults aged 30 to 50. In contrast, some groups are under-represented among people living with AIDS (PLWA). Women make up only 6% of PLWA, and youth under 25 make up less than 3% of PLWA.

Although there are challenges facing us in this new era of the epidemic, San Francisco has had several HIV prevention successes on which a solid foundation for future prevention efforts can be built. For example, needle exchange and other strong community-based prevention efforts have reduced new HIV infections to endemic (as opposed to epidemic) levels among IDUs. However, some epidemiologists believe that these infection rates are sufficient to sustain HIV prevalence among IDU populations indefinitely. The exception among IDUs is MSM-IDU; this group continues to experience increased infection rates, probably due to increases in high-risk sexual behaviors and not to increases in needle sharing.

Another success is that there continues to be no epidemic among non-IDU heterosexual men and women in San Francisco. The few new cases of HIV that occur among these populations each year are generally among partners of IDUs and females who have sex with MSM. Therefore, the absence of an epidemic among heterosexuals is likely due, at least in part, to effective prevention efforts among MSM and IDU.

The final piece of good news is that new HIV infections among children born to HIV-positive mothers and among blood product recipients continue to be extremely uncommon in San Francisco. In 2000 and 2001 there were no perinatal HIV cases, and in 2002 there were two cases.

The rest of this chapter presents the data that supports this summary of the epidemic, including how HIV infections and AIDS are currently distributed in San Francisco and some of the recent trends in HIV and AIDS. Data obtained from AIDS Surveillance Quarterly Reports is from June 2003. For the latest quarterly report, see *http://www.dph.sf.ca.us/Reports/HlthAssess.htm*.

SECTION II

Demographics and AIDS Statistics

Citywide Profile

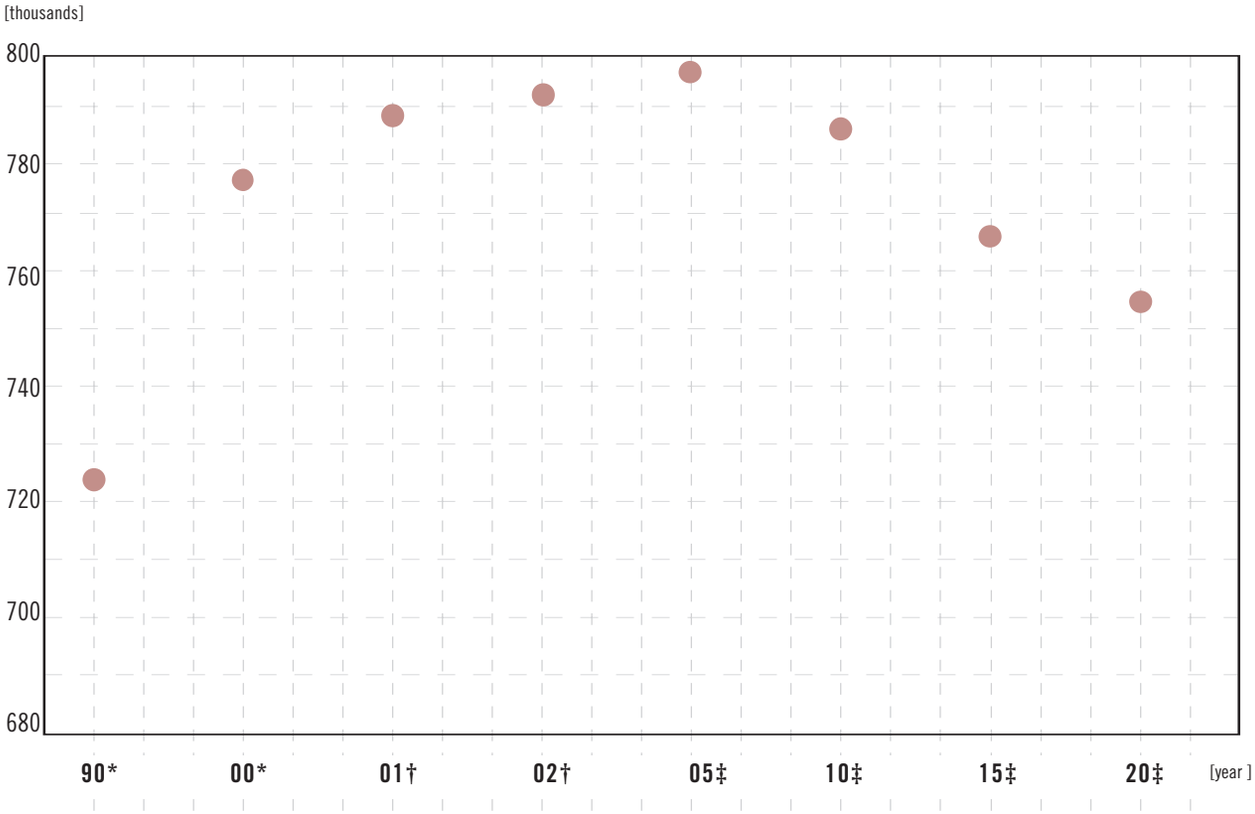
San Franciscans have been highly impacted by the epidemic. In 2003, approximately 18,000 to 19,000 people were living with HIV and AIDS out of a total of approximately 791,600 residents, for an overall HIV prevalence of approximately 2.4%.

Based on an SFDPH pilot study, there are an estimated 20% of people living with HIV who are not in care, the majority of whom do not know they are infected (Willi McFarland, personal communication, 2003). The percentage of San Francisco residents who do not know they are infected is likely lower than the national percentage (Bingham et al 2002), due to San Francisco's successful outreach and counseling and testing efforts.

- According to the U.S. Census, the overall population of San Francisco increased by 7.3%, or 52,774 people, between 1990 and 2000. The population increase for the Bay Area overall was even greater, at 12.6%.
- Since 2000, population growth in San Francisco has begun to slow. As of 2002, San Francisco was the fourth largest city in California, with a population of 791,600 (Exhibit 1).
- San Francisco County ranks second only to Los Angeles County in the number of PLWA, with 17% of California residents living with AIDS residing in San Francisco (Exhibit 2).
- Among California counties, San Francisco has had the highest number of people diagnosed with AIDS per 100,000 population since the epidemic began. This is five times the number of cumulative AIDS cases per 100,000 population in Marin, the county second most affected (Exhibit 3). In Marin, the high AIDS case rate is in part due to PLWA in San Quentin prison.
- Over half of PLWA in the nine Bay Area counties live in San Francisco, and nearly one third of all PLWA in California live in the Bay Area (Exhibit 3).
- Not all San Francisco neighborhoods have been impacted equally. Exhibit 4 shows the distribution of PLWA by neighborhood, based on their residence at time of diagnosis. The Castro, the Tenderloin, and Western Addition are the neighborhoods with the most PLWA. Other strongly affected neighborhoods include Diamond Heights, parts of Potrero Hill, South of Market, and Bayview/Hunter's Point.
- In recent years, there has been an increase in the number of individuals living with AIDS, largely due to the rapid increases in the use of highly active antiretroviral therapy (HAART) after 1995. As the number of PLWA increases, the pool of infection expands.

EXHIBIT I

San Francisco Population, 1990 – 2020



*Source: U.S. Census Bureau, Census 2000.
†Source: State of California, Department of Finance, E-1 City/County Population Estimates, with Annual Percent Change, January 1, 2002 and 2003. Estimates as of May 2003.
‡Source: California Department of Finance, Interim County Population Projections, Projections for 2005, 2010, 2015, and 2020 as of June 2001. Projections based on 2000 census data.

EXHIBIT 2

Ten California Counties with the Highest Number of People Living with AIDS, 2003

COUNTY	NUMBER OF PERSONS LIVING WITH AIDS	PERCENT OF ALL CASES IN CALIFORNIA	CUMULATIVE AIDS CASES PER 100,000 POPULATION
Los Angeles	18,152	34%	489
San Francisco	9,401	17%	3,302
San Diego	5,299	10%	420
Orange	3,062	6%	224
Alameda	2,644	5%	448
Riverside	2,593	5%	315
Santa Clara	1,476	3%	205
San Bernardino	1,336	2%	179
Sacramento	1,315	2%	266
Contra Costa	875	2%	252
SUBTOTAL	**46,153**	**86%**	-
TOTAL CALIFORNIA	**53,976**	**100%**	**388**

Source: California State Office of AIDS, AIDS Case Statistics, June 2003. SFDPH, HIV/AIDS Statistics and Epidemiology Section, special data request, June 2003.

EXHIBIT 3

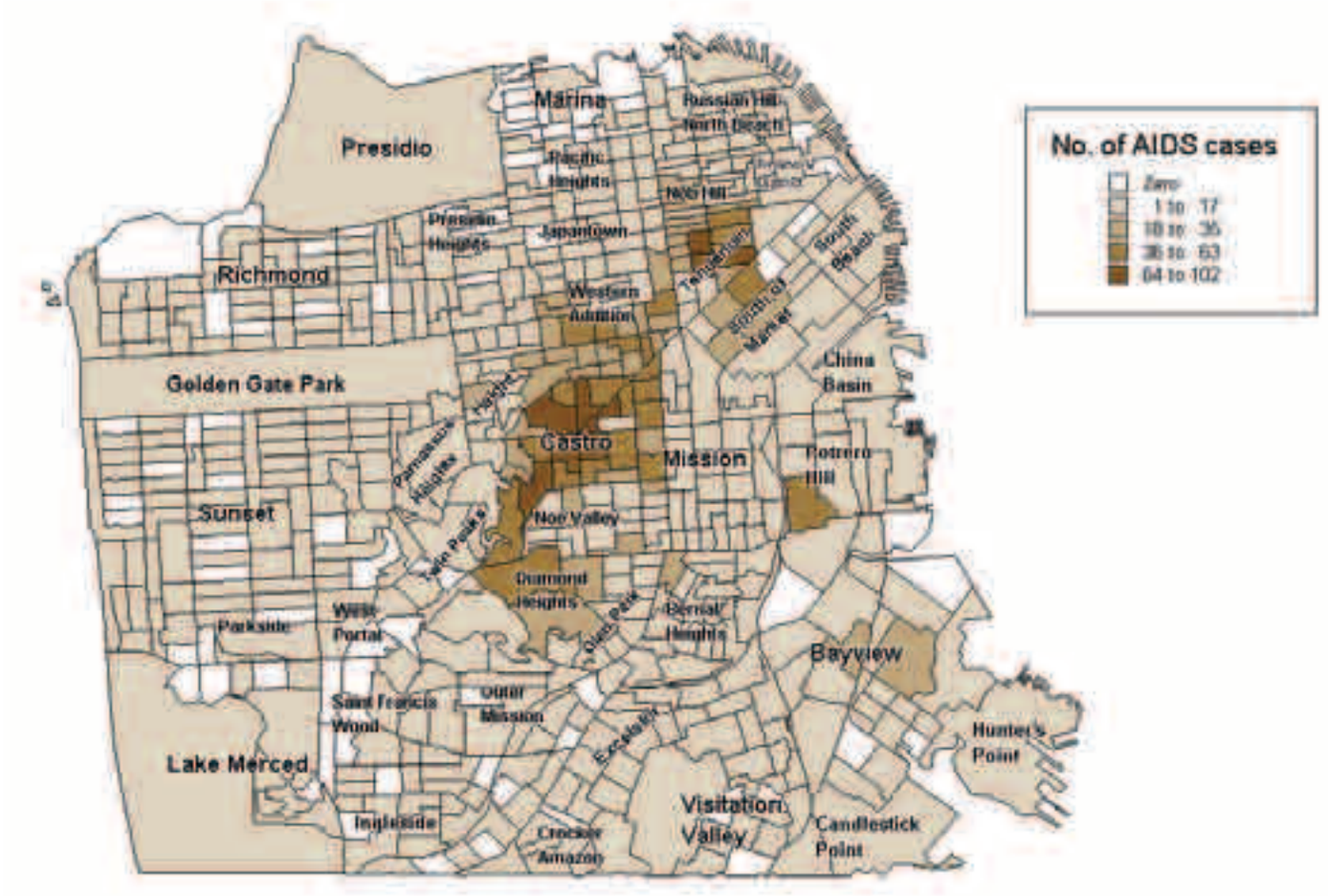
People Living with AIDS in the San Francisco Bay Area, 2003

COUNTY	NUMBER OF PERSONS LIVING WITH AIDS	PERCENT OF ALL CASES IN BAY AREA	CUMULATIVE AIDS CASES PER 100,000 POPULATION
San Francisco	9,401	54%	3,302
Alameda	2,644	15%	448
Santa Clara	1,476	9%	205
Contra Costa	875	5%	251
San Mateo	776	4%	282
Marin	708	4%	633*
Sonoma	683	4%	381
Solano	682	4%	345
Napa	73	<1%	165
TOTAL SAN FRANCISCO BAY AREA	**17,318**	**32%†**	-
TOTAL CALIFORNIA	**53,976**	**100%**	**388**

Source: California State Office of AIDS, AIDS Case Statistics, June 2003. HIV/AIDS Statistics and Epidemiology Section, special data request, June 2003.
*The high AIDS case rate in Marin is in part due to PLWA in San Quentin prison.
†This is the percent of all California AIDS cases that are among people living in the Bay Area.

EXHIBIT 4

People Living with AIDS by San Francisco Neighborhood, 2003



Source: HIV/AIDS Statistics and Epidemiology Section, special data request, June 2003.
Note: For additional HIV and AIDS maps, see the Atlas of HIV/AIDS in San Francisco 1991-2000 published by SFDPH, HIV/AIDS Statistics and Epidemiology Section, 2003 (*http://www.dph.sf.ca.us/Reports/HlthAssess.htm#atlas*).

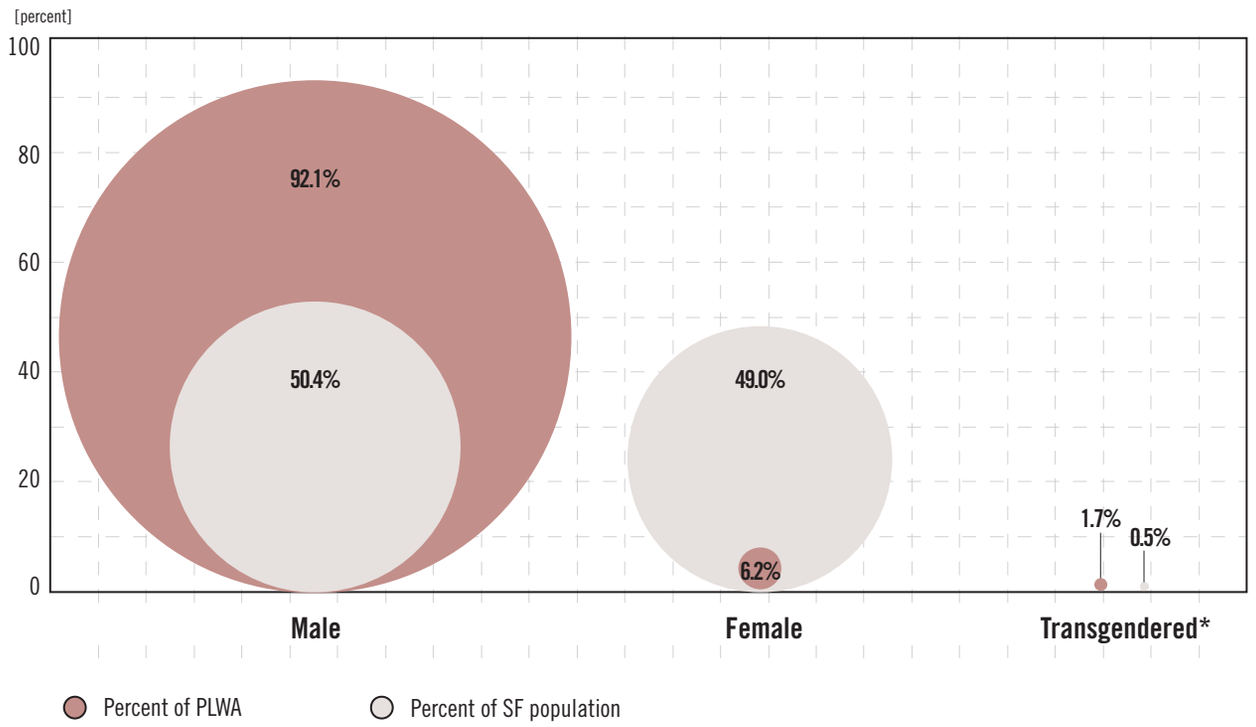
Gender

In San Francisco, men (mostly MSM) and MTF transgendered persons are disproportionately affected by HIV/AIDS.

- Although men make up 50% of San Francisco's population, they represent 92% of the PLWA (Exhibit 5) and an estimated 82% of all new HIV infections (Exhibit 13, BRPs 1, 3, 5, and 8).
- MTF transgendered persons make up less than 1% of the population, yet they represent nearly 2% of people living with AIDS (Exhibit 5) and an estimated 13% of all new HIV infections (Exhibit 13, BRPs 2 and 6).
- Nationally, women represent approximately 30% of the new HIV infections in the country (CDC's A Glance at the HIV Epidemic, *http://www.cdc.gov/nchstp/od/news/At-a-Glance.pdf*). In San Francisco, although women make up 49% of the population, they represent only 6% of PLWA and an estimated 5% of all new HIV infections (Exhibit 13, BRPs 4 and 7).

EXHIBIT 5

San Francisco Population (2000) and People Living with AIDS (2003) by Gender



Source: U.S. Census Bureau, Census 2000. AIDS Surveillance Quarterly Report, June 2003.
Note: The Census does not include "transgendered" as a gender category. The size of the transgendered population in San Francisco is estimated at 4,000, including 3,000 MTF and 1,000 female-to-male (FTM) (HPPC 2001). To determine the proportion of the population that is transgendered, the estimated number of MTF transgendered individuals (3,000) was subtracted from the total 2000 Census count of females in San Francisco, and the estimated number of FTM transgendered individuals (1,000) was subtracted from the total 2000 Census count of males.
*This category encompasses both MTF and FTM transgendered persons.

Race/Ethnicity

Although whites are the single largest racial group in San Francisco, more than half of the city's residents are people of color. All racial/ethnic groups in San Francisco are affected by HIV and AIDS, and African Americans and whites are disproportionately affected.

- One third of adults living with AIDS are people of color (Exhibit 6). The past decade has seen a slight increase in the proportion of people of color living with AIDS and a decrease in the proportion of whites living with AIDS.

- African Americans and whites continue to be disproportionately affected by HIV and AIDS compared with their numbers in the population (Exhibit 6).
  - African Americans make up 8% of San Francisco's population but represent 15% of all PLWA in San Francisco.
  - Whites make up 44% of the city's population but represent 67% of all PLWA.

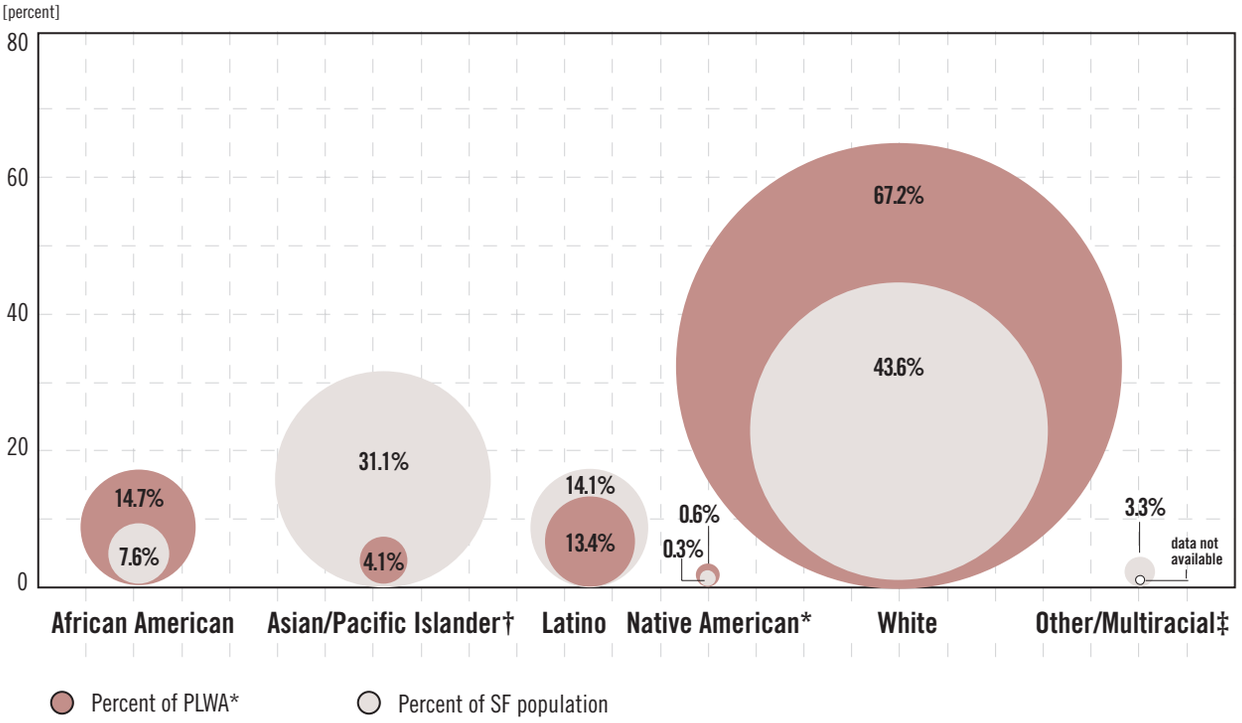
- The number of Latinos and Native Americans living with AIDS is proportionate to their numbers in the population (Exhibit 6). However, the low numbers of Native Americans living in San Francisco make it difficult to determine whether this population is in fact disproportionately affected.
  - Latinos make up 14% of the population and 13% of PLWA.
  - Native Americans make up less than 1% of the population and less than 1% of PLWA.
  - It should be noted that limitations in the way the data is collected might result in the misclassification of Latinos and Native Americans living with AIDS into other racial/ethnic categories (see Appendix 1: Data Limitations).

- Asian/Pacific Islanders are underrepresented among PLWA. They make up 31% of San Francisco's population but only 4% of PLWA (Exhibit 6).

- 66% of females living with AIDS are women of color. 44% of females living with AIDS are African American.

EXHIBIT 6

San Francisco Population (2000) and People Living with AIDS (2003) by Race/Ethnicity



Source: U.S. Census Bureau, Census 2000. AIDS Surveillance Quarterly Report, June 2003.
Note: The 2000 Census, unlike the 1990 census, allowed individuals to select more than one racial/ethnic identification. See Exhibit 7 for the number and percent of individuals who identify as partially or fully belonging to each racial/ethnic group.
*Includes Alaska Native.
†Includes Native Hawaiian.
‡Data not available for PLWA.

EXHIBIT 7

Number/Percent of Individuals Who Identify as Partially or Fully Belonging to Each Racial Category, San Francisco, 2000

RACE	NUMBER	PERCENT OF TOTAL POPULATION
African American/Black	67,076	8.6%
Asian/Pacific Islander	259,750	33.4%
Latino/Hispanic	109,504	14.1%
Native American/Alaskan Native	8,971	1.2%
White/Caucasian	411,427	53.0%
Other Race	65,757	8.5%
TOTAL	**922,485***	**N/A**

Source: U.S. Census Bureau, Census 2000.
*This total is the total number of racial/ethnic identifications made, not the total number of persons in San Francisco. The totals exceed 100% because individuals who identify with more than one race/ethnicity appear in more than one category.

EXHIBIT 8

Ethnic Identification Among San Francisco's Asian Population, 2000

ASIAN ETHNIC GROUP	IDENTIFY WITH ONE ASIAN ETHNIC GROUP	IDENTIFY WITH ONE OR MORE ASIAN ETHNIC GROUPS	IDENTIFY WITH ONE OR MORE ASIAN ETHNIC GROUPS AND ANOTHER RACIAL GROUP
Asian Indian	5,524	5,851	6,616
Bangladeshi	45	49	57
Cambodian	1,023	1,174	1,358
Chinese, except Taiwanese	151,965	156,101	160,113
Filipino	40,083	41,229	45,793
Hmong	30	33	33
Indonesian	778	904	1,142
Japanese	11,410	12,418	14,618
Korean	7,679	8,027	8,706
Laotian	564	627	707
Malaysian	111	193	244
Pakistani	436	489	636
Sri Lankan	73	79	96
Taiwanese	655	759	834
Thai	1,329	1,440	1,638
Vietnamese	10,722	12,562	12,874

Source: U.S. Census Bureau, Census 2000.

EXHIBIT 9

Racial Identification Among San Francisco's Latino Population, 2000

RACE	IDENTIFY WITH ONLY ONE RACE		IDENTIFY WITH ONE OR MORE RACES	
	Number	Percent	Number	Percent
African American	1,724	1.6%	3,006	2.7%
Asian/Pacific Islander	1,634	1.5%	9,386	8.6%
Native American	1,438	1.3%	2,949	2.7%
White	46,819	42.8%	55,053	50.3%
Other	47,788	43.6%	55,704	50.9%
TOTAL NUMBER OF LATINOS	109,504			

Source: U.S. Census Bureau, Census 2000.
Note: In the 2000 U.S. Census, Latino is considered an ethnicity, not a race. Therefore, all individuals who identified as Latino were also asked to select one or more racial identifications, which are presented in this Exhibit.

EXHIBIT 10

Ethnic Identification Among San Francisco's Latino Population, 2000

ETHNICITY	NUMBER	PERCENT OF TOTAL
MEXICAN	**48,935**	**44.7%**
PUERTO RICAN	**3,758**	**3.4%**
CUBAN	**1,632**	**1.5%**
OTHER HISPANIC OR LATINO	**55,179**	**50.4%**
DOMINICAN (DOMINICAN REPUBLIC)	148	0.1%
CENTRAL AMERICAN (EXCLUDES MEXICAN)	23,367	21.3%
Costa Rican	326	0.3%
Guatemalan	3,196	2.9%
Honduran	934	0.9%
Nicaraguan	5,459	5.0%
Panamanian	261	0.2%
Salvadoran	10,655	9.7%
Other Central American	2,536	2.3%
SOUTH AMERICAN	5,007	4.6%
Argentinean	540	0.5%
Bolivian	258	0.2%
Chilean	405	0.4%
Colombian	817	0.7%
Ecuadorian	329	0.3%
Paraguayan	16	0%
Peruvian	1,769	1.6%
Uruguayan	38	0%
Venezuelan	234	0.2%
Other South American	601	0.5%
ALL OTHER HISPANIC OR LATINO	26,657	24.3%
Spaniard	703	0.6%
Spanish	3,640	3.3%
Spanish American	239	0.2%
Not elsewhere classified	22,075	20.2%
TOTAL HISPANIC OR LATINO (OF ANY RACE)	**109,504**	**100%**

Source: U.S. Census Bureau, Census 2000.

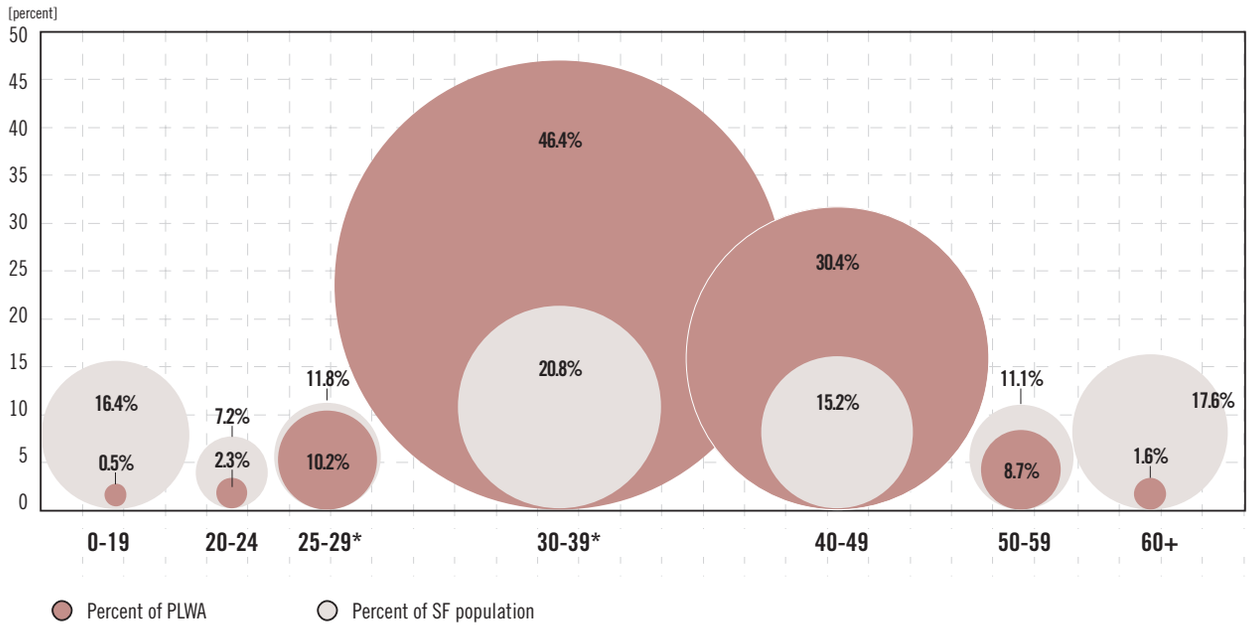
Age

Approximately three quarters of San Francisco's population are adults ages 25 and older (76%), and the vast majority of PLWA are 25 and older. The median age for all San Franciscans is 36.5 years old. For more detailed information on youth, see Chapter 3: Community Assessment (pp. 45-136).

- Exhibit 11 shows that the majority of PLWA in San Francisco are ages 30 and over (87%), and an additional 10% are between 25 and 29.
- The number of PLWA in their forties and fifties is growing; 39% of PLWA are between 40 and 59 years old.
- Youth aged 24 and under make up 24% of San Francisco's population but only 3% of PLWA (Exhibit 11). The racial/ethnic distribution of AIDS among youth is as follows: 45% white, 26% Latino, 19% African American, 9% Asian/Pacific Islander, and 2% Native American.
- It is important to note that data on PLWA reflects acquisition of HIV at a younger age. Therefore, although youth represent a small proportion of PLWA, PLWA in their twenties and early thirties may have been infected when they were much younger.

EXHIBIT 11

San Francisco Population (2000) and People Living with AIDS (2003) by Age



Source: U.S. Census Bureau, Census 2000. AIDS Surveillance Quarterly Report, June 2003.
*Data on transgendered PLWA is only available for two age categories: (1) under 30, and (2) 30 and over. Those under 30 were placed in the 25-to-29 age group, and those 30 and older were placed in the 30-to-39 age group.

Behavioral Risk Population

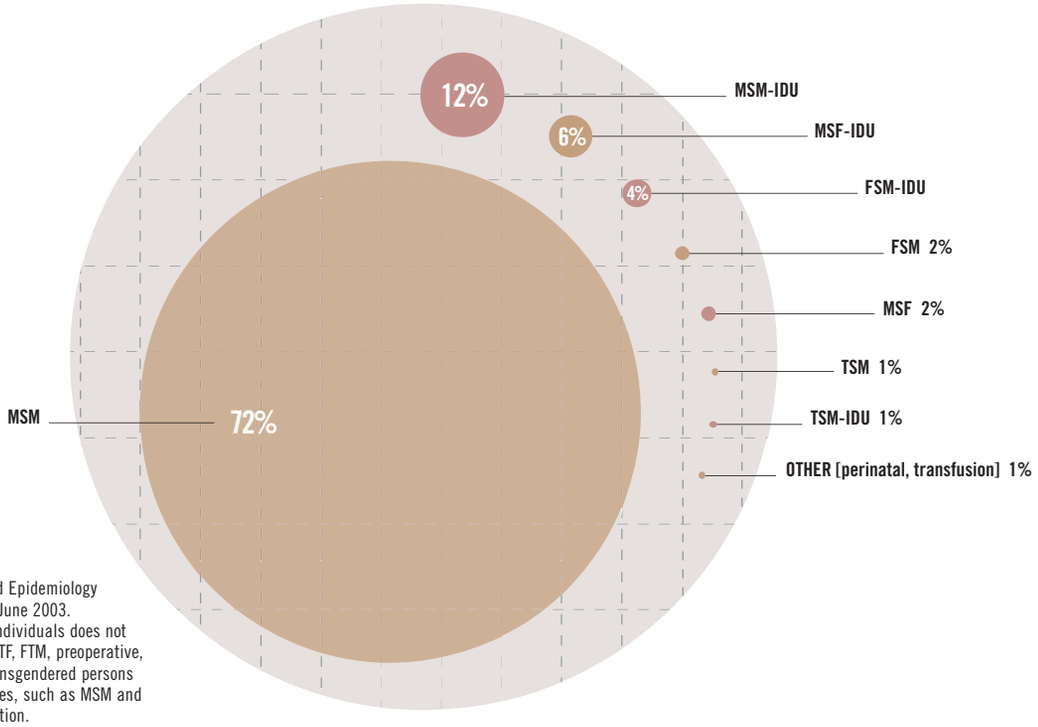
For a description of each of the eight behavioral risk populations (BRPs) and their acronyms, see the foldout from the back cover of the Plan (alphabetical list) or Chapter 4: Priority-Setting, pp. 142-143 (listed in prioritized order).

Nearly three quarters of PLWA are MSM or MSM/F (71%) and an additional 12% are MSM-IDU or MSM/F-IDU. These BRPs also have high rates of new HIV infections. Although TSM, TSM/F, TSF and TSM-IDU, TSM/F-IDU, TSF-IDU represent only a small proportion of PLWA (2%), these BRPs have high incidence rates. (For more about HIV incidence, see Section III, pp. 27-39.)

- The composition of San Francisco's AIDS epidemic is remarkably different from the national profile. Seventy-one percent of PLWA in San Francisco are MSM (Exhibit 12), compared with 45% nationally (CDC's Cases of HIV Infection and AIDS in the United States, 2002 *http://www.cdc.gov/hiv/stats/hasr1402/table11.htm*).
- MSM and MSM-IDU together make up approximately 83% of PLWA. Of the MSM and MSM-IDU cases reported, 73% are among whites, 13% are among Latinos, 10% are among African Americans, 4% are among Asian/Pacific Islanders, and less than 1% are among Native Americans.
- Some racial/ethnic groups are disproportionately affected by AIDS within certain BRPs, compared with their numbers in the population.
- African Americans are disproportionately represented in all the BRPs, with the exception of MSM, MSM/F.
- Whites are over-represented in the MSM, MSM/F and MSM-IDU, MSM/F-IDU BRPs.
- Latinos are over-represented in the MSF, FSM, and transgender BRPs.
- Asian/Pacific Islanders have fewer PLWA in each of the BRPs than would be expected given their proportions in the overall San Francisco population.

EXHIBIT 12

People Living with AIDS by BRP, San Francisco, 2003



Source: HIV/AIDS Statistics and Epidemiology Section, special data request, June 2003.
Note: Data on transgendered individuals does not currently distinguish among MTF, FTM, preoperative, and postoperative. Data on transgendered persons might appear in other categories, such as MSM and MSM-IDU, due to misclassification.

SECTION III

HIV Prevalence and Incidence

Background

San Francisco's approach to tracking the HIV epidemic takes into account four basic assumptions (McFarland 2003):

- All data is potentially biased.
- No single study gives the entire picture.
- More data is better than less data.
- If all signs point up, look up. That is, if evidence can be corroborated by multiple sources, it is more likely reflective of real trends.

In this section, three types of data are presented:

- **HIV incidence and prevalence estimates from the 2001 Consensus Meeting.** In 2001, the SFDPH AIDS Office convened a meeting of community and academic researchers, epidemiologists, and behavioral scientists to examine the findings from prevalence, incidence, and behavioral studies conducted in San Francisco. The goal of the meetings was to review current studies and data to determine HIV prevalence and incidence estimates for the San Francisco BRPs, with the additional goal of providing data on incidence and prevalence estimates for specific BRP subpopulations. This process has come to be known as the Consensus Meeting. The San Francisco HIV Consensus Meeting occurred over two days in January and February of 2001.
- **Counseling and testing data from voluntary testers at publicly funded sites.** All publicly funded confidential and anonymous test sites report their data to SFDPH. This data is used to monitor trends in incidence over time for various populations. However, not all incidence estimates derived from this data are reliable, due to low numbers of tests and/or low numbers of individuals found to be HIV-positive. Moreover, the data only reflects persons who access counseling and testing services. For a description of additional limitations of this data, refer to Appendix 1.
- **Recent trends in indicators of HIV risk.** HIV indicator data (i.e., data that could be considered markers for HIV infection, such as prevalence of high-risk behavior or STD rates) provides additional information about the direction of the HIV epidemic.

These three sources of data all support the following conclusions:

- There continues to be an epidemic among MSM, MSM-IDU, and MTF transgendered persons in San Francisco. A few indicators suggest that new infection rates among MSM may be stabilizing and leveling off, but it is too soon to make any definitive conclusions.
- San Francisco has endemic levels of infection among MSF-IDU and female IDU, which is enough to sustain the pool of HIV infection in these groups indefinitely.
- There is no epidemic among non-IDU heterosexuals in San Francisco. The few HIV infections that occur among heterosexual females are largely attributable to sex with IDU partners and sex with MSM. The few HIV infections that occur among heterosexual men who have sex exclusively with women are mostly attributable to sex with IDU partners.

It is important to note that HIV reporting in California (using a non-names-based system) became a requirement in July 2002. Once complete HIV reporting data becomes available, additional information on prevalence and incidence will also be available.

HIV Prevalence and Incidence Estimates: 2001 Consensus Meeting

Exhibits 13 and 14 present HIV prevalence and incidence estimates by BRP that were agreed on at the 2001 Consensus Meeting. They have been updated to June 30, 2003 using the method described in the following paragraphs. The incidence data in Exhibit 13 forms the foundation for San Francisco's HIV prevention priorities. The HPPC determines funding guidelines for each BRP based on the proportion of all new infections that occur within that BRP. (For more information on San Francisco's priority-setting model, see Chapter 4: Priority-Setting, pp. 137-156.)

The following limitations should be considered when interpreting the data:

- **Prevalence.** The 2003 prevalence data in Exhibit 13 represents estimates that do not account for changes in BRP size since 2001 nor the real number of seroconversions in 2001 because such data is not available. The method used to calculate the updated prevalence was:

  HIV prevalence 2001
  + Estimated new HIV infections in 2001, 2002, and 2003 (January-June)
  – AIDS deaths in 2001, 2002, and 2003 (January-June)
  = Estimated HIV prevalence as of June 30, 2003

  In addition, the prevalence of HIV by race/ethnicity was estimated by apportioning all HIV/AIDS cases according to living AIDS cases.

- **Incidence.** In 2004, it is expected that new HIV infections will be distributed across BRPs in the same proportions as in 2001. However, until another Consensus Meeting is held, the exact numbers of expected new infections in each BRP in 2004 cannot be determined. Therefore, the numbers of expected new infections and the annual incidence rate listed in Exhibit 13 are the 2001 estimates.

EXHIBIT 13

HIV Prevalence and Incidence Estimates by BRP, San Francisco

BRP	TOTAL POPULATION SIZE 2001*	ESTIMATED HIV PREVALENCE, 12/31/00: n (%)	ESTIMATED HIV PREVALENCE, 6/30/03: n (%)	ESTIMATED NUMBER OF NEW INFECTIONS ANNUALLY	ESTIMATED HIV INCIDENCE PER YEAR
1. MSM, MSM/F	46,800	12,786 (27.3%)	13,611 (29.1%)	748	2.2%
2. TSM, TSM/F, TSF, TST, TSM/T, TSF/T†	2,160	513 (23.8%)	656 (30.4%)	102	6.2%
3. MSM-IDU, MSM/F-IDU	3,982	2,080 (52.2%)	2,100 (52.7%)	87	4.6%
4. FSM-IDU, FSF-IDU, FSF/M-IDU	4,850	485 (10.0%)	525 (10.8%)	48	1.1%
5. MSF-IDU	9,000	900 (10.0%)	899 (10.0%)	45	0.6%
6. TSM-IDU, TSM/F-IDU, TSF-IDU, TST-IDU, TSM/T-IDU, TSF/T-IDU†	840	537 (63.9%)	579 (68.9%)	40	13.2%
7. FSM, FSM/F, FSF	5,000§	334 (0.1% of total population)	333 (0.1% of total population)	10	<0.1%
8. MSF	2,000§	82 (<0.1% of total population)	75 (<0.1% of total population)	2	<0.1%
Pediatric‡	-	49	51	- -	- -
Transfusion/ Blood Products‡	-	51	53		-
TOTAL	791,600	17,817 (2.3%)	18,882 (2.4%)	1,082	

Source: HIV Consensus Meeting (SFDPH 2001a). HIV/AIDS Statistics and Epidemiology Section, special data request, August 2003.
*Population sizes for BRPs have not been updated since 2001. Preliminary analysis of the data from the 2001 Behavioral Risk Factor Survey suggests that the MSM, MSM/F population (especially HIV-negative) has increased, although actual numbers are not yet available.
†Consensus estimates include only MTF transgendered persons, and not males or females who have sex with transgendered individuals.
‡Consensus estimates were not derived for pediatric or transfusion recipient populations. The pediatric prevalence number given includes children under 12 living with HIV, based on surveillance data. The transfusion prevalence number given includes adults living with AIDS; it is not known how many are living with HIV.
§This is the number considered to be at risk within these BRPs, not the total population size.

EXHIBIT 14

HIV Prevalence Estimates by BRP and Race/Ethnicity, San Francisco

BRP	ESTIMATED NUMBER LIVING WITH HIV				
	African American	Asian/ Pacific Islander	Latino	Native American	White
1. MSM, MSM/F	1,101	552	1,794	46	10,118
2. TSM, TSM/F, TSF, TST, TSM/T, TSF/T*	191	91	183	42	149
3. MSM-IDU, MSM/F-IDU	371	38	236	30	1,421
4. FSM-IDU, FSF-IDU, FSF/M-IDU	266	14	55	8	182
5. MSF-IDU	432	20	96	9	341
6. TSM-IDU, TSM/F-IDU, TSF-IDU, TST-IDU, TSM/T-IDU, TSF/T-IDU*	221	52	124	33	150
7. FSM, FSM/F, FSF	118	36	68	8	104
8. MSF	21	8	23	0	24
TOTAL ESTIMATED NUMBER LIVING WITH HIV†	2,746	828	2,599	182	12,527
TOTAL POPULATION‡	58,791-67,076	241,775-259,750	109,504	2,020-8,971	338,909-411,427
TOTAL ESTIMATED PREVALENCE BY RACE/ETHNICITY§	4.1 - 4.7%	.3%	2.4%	2.0 - 9.0%	3.0 - 3.7%

Source: HIV Consensus Meeting (SFDPH 2001a), and HIV/AIDS Statistics and Epidemiology Section, special data request.
Note: The estimated HIV prevalence for San Francisco as a whole is 2.4%.
*Includes MTF transgendered persons only.
†Does not include pediatric or transfusion cases.
‡Source: U.S. Census Bureau, Census 2000. The lowest number in the range represents individuals who identify only as that racial group. The highest number in the range represents individuals who identify only as that racial group plus those who identify as that racial group as well as one or more other racial groups.
§This is the total estimated number of people living with HIV divided by the total population size, for each racial group. A range is given because depending on the denominator, the estimated HIV prevalence is different (see previous footnote).

Counseling and Testing Data

A practical method for estimating HIV incidence is analysis of counseling and testing data. Two types of counseling and testing incidence data are presented in Exhibit 15: (1) the STARHS methodology (serological testing algorithm for recent HIV seroconversion), and (2) repeat tester data. This data is from individuals who voluntarily sought anonymous or confidential HIV testing in recent years and therefore is not necessarily representative of the entire San Francisco population.

The counseling and testing incidence data presented in Exhibit 15 should not be compared directly with incidence data from the 2001 Consensus Meeting presented in Exhibit 13; the data in Exhibit 13 takes into account multiple data sources, whereas the data in this section comes only from testers. Any differences between the data in Exhibit 13 and the data presented here cannot necessarily be interpreted as increases or decreases in the incidence rates. See Appendix 1 for a more in-depth description of the limitations of counseling and testing data.

EXHIBIT 15

Summary of HIV Incidence Among Voluntary HIV Testers in San Francisco by BRP

BRP	STAHRS (2001 - 2002)*		REPEAT TESTERS (2000 - 2001)*	
	Number of Recent Infections	Incidence Rate: Percent per Year	Number of Seroconversions	Incidence Rate: Percent per Year
1. MSM, MSM/F	39	2.7%	212	2.1%
2. TSM, TSM/F, TSF, TST, TSM/T, TSF/T†	1	6%	15	8%
3. MSM-IDU, MSM/F-IDU	2	7%	23	5%
4. FSM-IDU, FSF-IDU, FSF/M-IDU	0	0.0%	5	1%
5. MSF-IDU	3	7%‡	12	1.7%
6. TSM-IDU, TSM/F-IDU, TSF-IDU, TST-IDU, TSM/T-IDU, TSF/T-IDU†	0	0%	5	17%‡
7. FSM, FSM/F, FSF	6	<1%	13	<1%
8. MSF	18	<1%	20	<1%

*See Appendix 1 for data limitations.
†Includes only MTF transgendered persons.
‡Likely an overestimate due to small sample size.

Recent Trends in the HIV Epidemic: HIV Indicator Data

The pieces of data presented in this section are considered indicators for HIV infection because they signal high-risk sexual behavior taking place among a population. The following indicator data is presented by BRP. BRPs with similar indicators (e.g., MSM, MSM/F and MSM-IDU, MSM/F-IDU) have been grouped together.

BRP 1: MSM, MSM/F and BRP 3: MSM-IDU, MSM/F-IDU

The weight of the evidence suggests that HIV incidence among MSM and MSM-IDU has been increasing since 1998 and remains high.

For MSM, counseling and testing data provides estimates of incidence under 2% per year for 1998 and earlier, and estimates ranging from 2% to 4% per year from 1999 and later. Trends in some incidence and risk behavior data for MSM suggest that a possible plateau or decrease in new infections is on the horizon (Exhibit 16), but it is premature to determine whether this trend will continue.

For MSM-IDU, counseling and testing data suggests that HIV incidence remains high at over 4% per year, and a recent study suggests an increase in seroprevalence among gay and bisexual IDUs from 25% in 1996 to 42% in 2000 (Bluthenthal et al 2001). Although sexual behavior is the primary transmission route among MSM-IDU, needle sharing still occurs among this group, possibly at rates of 30% or higher (Bluthenthal et al 2001, Kral et al 2003). In addition, many of the indicators of HIV sexual risk behavior for MSM and MSM-IDU have continued to increase in recent years, such as syphilis diagnoses and rates of unprotected anal sex (Exhibit 16).

African American and Latino MSM continue to have the highest HIV prevalence among anonymous testers, at 9.7% and 5.8% respectively. Latino MSM also have the highest HIV incidence among testers (3.5% per year). Despite the high HIV prevalence among African American MSM, incidence remains low at 0.8% per year, which may be due to African Americans getting tested later after infection compared with other groups. White and Asian/Pacific Islander MSM have moderately high HIV prevalence (3.2% for both groups) and incidence (2.3% and 2.5% per year, respectively; SFDPH 2001b). It is noteworthy that, historically, Asian/Pacific Islander MSM have had lower rates HIV infection than other groups. However, a recent study showed that several indicators of high-risk behavior for Asian/Pacific Islander MSM surpassed those of white MSM in 2002 (McFarland et al, in press).

Both younger and older MSM are becoming infected with HIV. Outreach survey data suggests that new infection rates among MSM under 30 may be slightly higher than for MSM age 30 and over (Chen et al 2002), but infections are increasing in both groups (Chen et al 2003).

EXHIBIT 16

Trends in HIV Indicators for MSM, MSM/F and MSM-IDU, MSM/F-IDU in San Francisco

INDICATOR	TREND	DATA	DATA SOURCE
Male rectal gonorrhea	Increasing (may be due at least partly to increased screening)	2000: 201 cases 2001: 237 cases 2002: 308 cases 2003: 153 cases* *first six months	STD Prevention & Control surveillance data
Primary and secondary syphilis	Increasing	2000: 40 cases 2001: 116 cases 2002: 318 cases 2003: 194 cases* *first six months	STD Prevention & Control surveillance data
Mean number of sex partners	Increasing	2000: 6.2 partners 2001: 6.9 partners 2002: 16.84 partners 2003: 18.5 partners* *first six months	City Clinic data
Anal sex in past 6 months	**HIV-** Increasing but may be leveling off **HIV+** Decreasing since 2001	**HIV+ HIV-** 1999: 67% 69% 2000: 71% 73% 2001: 74% 75% 2002: 73% 71% 2003: 66%* 75%* *first five months	STOP AIDS data (Chen et al 2002, SFDPH 2002a)
Unprotected anal sex in past 6 months	**HIV-** Increasing but may be leveling off **HIV+** Decreasing since 2001	**HIV+ HIV-** 1999: 42% 32% 2000: 46% 36% 2001: 51% 37% 2002: 45% 32% 2003: 45%* 36%* *first five months	STOP AIDS data (Chen et al 2002, SFDPH 2002a)

EXHIBIT 16 (continued)

INDICATOR	TREND	DATA	DATA SOURCE
Unprotected anal sex with two or more partners in past 6 months	**HIV-** Increasing but may be leveling off **HIV+** Decreasing since 2001	**HIV+ HIV-** 1999: 30% 16% 2000: 37% 19% 2001: 37% 22% 2002: 34% 18% 2003: 32%* 22%* *first five months	STOP AIDS data (Chen et al 2002, SFDPH 2002a)
Unprotected anal sex with two or more partners of unknown serostatus in past 6 months	**HIV-** Increasing but may be leveling off **HIV+** Decreasing since 2001	**HIV+ HIV-** 1999: 19% 10% 2000: 20% 12% 2001: 25% 15% 2002: 23% 13% 2003: 18%* 16%* *first five months	STOP AIDS data (Chen et al 2002, SFDPH 2002a)
Percent of HIV testers reporting speed use	Increasing slightly*	1998: 1.4% 1999: 1.4% 2000: 1.7% 2001: 1.7% 2002: 1.8%	HIV/AIDS Statistics & Epidemiology Section, special data request, August 2003
Percent of HIV testers reporting poppers use	Increasing*	1998: 6.7% 1999: 5.6% 2000: 6.0% 2001: 9.4% 2002: 8.7%	HIV/AIDS Statistics & Epidemiology Section, special data request, August 2003

*This data is only for MSM seeking HIV testing and therefore is not necessarily reflective of trends in the general population. Although we do not have solid trend data for speed use, community evidence suggests that rates of speed use are high among gay men. For more on speed and poppers, see Chapter 3: Community Assessment, p. 109).

BRP 2: TSM, TSM/F, TSF, TST, TSM/T, TSF/T and BRP 6:TSM-IDU, TSM/F-IDU, TSF-IDU, TST-IDU, TSM/T-IDU, TSF/T-IDU

HIV incidence, prevalence, and risk behaviors appear to remain high among MTF transgendered persons, as suggested by counseling and testing data and trends in indicators. HIV incidence is difficult to determine among these BRPs using counseling and testing data because of the relatively low numbers of testers and individuals found to be HIV-positive, which makes the data unreliable. Despite these limitations, it appears that incidence rates among MTF transgendered persons (IDU and non-IDU) continue to be the highest of any BRP. However, there is little new data since the 2001 San Francisco HIV Prevention Plan was published to indicate whether new HIV infections are increasing or decreasing. The recent HIV Testing Survey conducted locally found lower rates of unprotected receptive and insertive anal sex than for other populations (SFDPH 2002a). In fact, rates of unprotected sex with non-primary partners were less than 10%, indicating a possible increase in protective behaviors among this population. The small sample size for this study (n=96) should be noted. Exhibit 17 shows trends in other HIV indicators.

African American MTF transgendered persons continue to be disproportionately affected by HIV, with the highest HIV prevalence (33%) and incidence (17.5% per year) of any racial/ethnic group (SFDPH 2001b). A recent SFDPH study found a 58% HIV prevalence among African American MTF transgendered persons living in San Francisco or the East Bay (Rose et al 2002).

EXHIBIT 17

Trends in HIV Indicators for TSM, TSM/F, TSF, TST, TSM/T, TSF/T and TSM-IDU, TSM/F-IDU, TSF-IDU, TST-IDU, TSM/T-IDU, TSF/T-IDU in San Francisco

INDICATOR	TREND	DATA	DATA SOURCE
Mean number of sex partners	Unclear, possibly increasing†	2000: 31.0 partners 2001: 16.4 partners 2002: 114.0 partners 2003: 55.2 partners* *first six months	City Clinic data
Primary and secondary syphilis	Remains low	2000: 1 case 2001: 0 cases 2002: 1 case 2003: 1 case* *first six months	STD Prevention & Control surveillance data

†Small sample size leads to wide variation in the data; therefore, this data does not point to any definitive conclusions.

BRP 4: FSM-IDU, FSM/F-IDU, FSF-IDU and BRP 7: FSM, FSM/F, FSF

Counseling and testing data suggests that HIV incidence remains low among female IDU and non-IDU at less than 1% per year. A slight increase in the mean number of sexual partners among female City Clinic patients over the last few years and high chlamydia rates suggest the need to continue to monitor risk behaviors and HIV transmission among women in San Francisco (Exhibit 18). In addition, recent data from the HIV Testing Survey suggests high rates of unprotected vaginal and anal sex among FSM who reported those types of sex (79% and 100%, respectively) and among FSM-IDU (81% and 100%, respectively) (SFDPH 2002a), although the sample sizes were small. Among female IDUs, needle sharing is still a concern, with rates possibly 30% or higher (Kral et al 2003). A recent analysis of data from the UFO Study demonstrated that females have higher needle sharing rates than men, and having an injection partner who was also a sexual partner was associated with increased risk among females (Evans et al 2003).

African American females, especially younger African American females, are severely and disproportionately affected by chlamydia, with rates eight times higher than those among white females. African American females are also disproportionately affected by AIDS. However, there is no current evidence to suggest that new HIV infections are increasing among African American females in San Francisco.

EXHIBIT 18

Trends in HIV Indicators for FSM, FSM/F, FSF, and FSM-IDU, FSM/F-IDU, FSF-IDU in San Francisco

INDICATOR	TREND	DATA	DATA SOURCE
Chlamydia	No clear trend	2000: 1,831 2001: 1,744 2002: 1,836 2003: 837* *first six months	STD Prevention & Control surveillance data
Gonorrhea	No clear trend, possibly decreasing	2000: 415 2001: 366 2002: 376 2003: 123* *first six months	STD Prevention & Control surveillance data
Mean number of sex partners	Increasing slightly	2000: 2.2 partners 2001: 2.3 partners 2002: 3.7 partners 2003: 6.6 partners* *first six months	City Clinic data
Percentage of total births that occur to mothers under 20 years old	Decreasing (the actual number of births is also decreasing)	1997: 7% 1998: 6% 1999: 6% 2000: 5%	Child Trends KIDS COUNT Special Report†

†Source: The Annie E. Casey Foundation, *http://www.aecf.org*.
Note: See also Exhibit 20.

BRP 5: MSF-IDU and BRP 8: MSF

HIV incidence remains low among MSF at less than 1% per year, according to counseling and testing data. A recent study noted that HIV incidence among MSF-IDU has remained stable since 1998 (Bluthenthal et al 2001). Current incidence rates for MSF-IDU are likely less than 1% per year, based on several data sources. However, rates of unprotected anal and vaginal sex among these groups are high according to the HIV Testing Survey (SFDPH 2002a). For MSF, rates of unprotected anal and vaginal sex among those who reported those types of sex were 88% and 69%, respectively, and for MSF-IDU the rates were 80% and 92%, respectively, although the sample sizes were small. Further, among MSF-IDU, needle sharing still occurs at rates of possibly 30% or higher (Bluthenthal et al 2001, Kral et al 2003). Increases in the number of sexual partners among male City Clinic patients and increases in the number of syphilis cases suggest the need to continue to monitor risk behaviors and HIV transmission among these populations (Exhibit 19). It should be noted that some of the recent syphilis cases (as well as recent HIV infections) may in fact be among MSM who did not report sex with men.

EXHIBIT 19

Trends in HIV Indicators for MSF and MSF-IDU in San Francisco

INDICATOR	TREND	DATA	DATA SOURCE
HIV prevalence among San Francisco's military recruits†	Remains low	1998: 0 cases 1999: 1 case 2000: 0 cases 2001: 0 cases	SFDPH 2002a
Primary and secondary syphilis	May be increasing slightly	1999: 5 cases 2000: 8 cases 2001: 14 cases 2002: 13 cases* *first nine months	STD Prevention & Control surveillance data
Mean number of sex partners	Increasing slightly	2000: 1.9 partners 2001: 2.2 partners 2002: 3.8 partners 2003: 3.9 partners	City Clinic data

†The sexual orientation/BRP of the one case reported in 1999 is not known. This data is placed in this BRP because to become a military recruit, men must report no sex with men and no injection drug use.

Other Populations: Pediatric and Transfusion HIV and AIDS Incidence

Between 1993 and 2002, 306 infants were born to HIV-positive mothers in San Francisco, and 51 (17%) of these infants have been confirmed to be HIV-infected. Fifty-two percent of the 306 exposed infants were African American, 19% were Latino, and 20% were white (SFDPH 2002a).

In the last six years (1997 through 2002), only four infected infants were born to HIV-infected mothers. No HIV-positive infants were born in 2000 or 2001. In 2002, two HIV-infected infants were born in San Francisco, although all pregnant known HIV-infected women received antiretroviral therapy. This data illustrates a continuing decline in, and near elimination of, HIV and AIDS incidence among infants and children (SFDPH 2002a). If new infections among infants occur, they are likely to be born to HIV-infected mothers who received late or no prenatal care. Trends in receipt of prenatal care for San Francisco women are presented in Exhibit 20.

As of June 2003, there are 35 PLWA who acquired HIV through transfusion. HIV transmission via blood products continues to be rare in San Francisco (1 in a million) (SFDPH 2001b).

EXHIBIT 20

Trends in Pediatric HIV Indicators in San Francisco

INDICATOR	TREND	DATA	DATA SOURCE
Percent of infants born to mothers with late, no, or unknown prenatal care	No change	1997: 3.6% 1998: 3.2% 1999: 3.6% 2000: 3.6% 2001: 3.5%	California Department of Health Services, Center for Health Statistics*

*Source: Query conducted on the following website: *http://www.applications.dhs.ca.gov/vsq/default.asp*.

APPENDIX 1

Types of Information Used in the Epidemiologic Profile and Strengths and Limitations

The Epidemiologic Profile draws on multiple sources of information, including U.S. Census data, the AIDS case registry, HIV counseling and testing data, other secondary data (e.g., on STDs), original research (e.g., prevalence studies, behavioral studies), and estimates arrived at by consensus among researchers. The following are descriptions, strengths, and weaknesses of the data sources used in this chapter.

U.S. Census Data

DESCRIPTION

The U.S. government conducts a census, or counting, of the U.S. population every ten years. All census data presented in this chapter is from the 2000 census unless otherwise indicated. Information about how the census was developed and implemented can be found at *http://www.census.gov/mso/www/c2000basics/00Basics.pdf.*

STRENGTHS AND LIMITATIONS

The census is the most comprehensive source of information about the U.S. population and its characteristics. However, vulnerable and marginalized populations, such as homeless individuals and people living in poverty, may be undercounted. In addition, transgendered persons are not counted. The census does not collect information on behavioral risk populations; therefore, we do not know, for example, how many men who have sex with men live in San Francisco. Finally, the 2000 census collected racial/ethnic information in a way that allowed individuals to more fully represent their identities than in previous censuses. Therefore, the data can be presented in many ways, not just the way it is presented in this chapter.

AIDS Case Registry Data

DESCRIPTION

An AIDS case registry is kept by each public health jurisdiction and contains basic demographic and transmission category information about those diagnosed with AIDS. Data on PLWA and recent AIDS cases is drawn from this source.

STRENGTHS AND LIMITATIONS

The AIDS Case Registry is the most complete source of data available regarding PLWA in San Francisco. Nevertheless, some groups may be under-represented in the AIDS case registry, such as Native Americans (some Native Americans have Spanish surnames and may be mistakenly classified as Latino) and transgendered persons (some MTF transgendered PLWA may be mistakenly classified as male or female, which may be in part due to reluctance to disclose identify for fear of discrimination in receiving treatment). Finally, AIDS case data is not a good indicator for trends in new HIV infections, as PLWA likely acquired HIV 5 to 15 years prior to their AIDS diagnosis. Therefore, HIV trend data, to the extent that it is available, must be taken into consideration as well.

HIV Counseling and Testing Data

DESCRIPTION

Publicly funded testing sites collect and report basic demographic information and test results from persons using the services. Estimates of HIV incidence in particular populations can be drawn from this data.

STRENGTHS AND LIMITATIONS

Although counseling and testing data is one of the primary indicators of HIV incidence, variability in the data due to low numbers of testers or low numbers of people found to be HIV-positive can compromise its validity in some cases. Furthermore, the data is self-reported and only represents those who seek testing at public sites, both of which support the need to interpret the data with caution. Finally, changes in the way the data is collected from year to year and incomplete data can also affect the generalizability of incidence estimates to the larger population. Specific limitations by data type are as follows:

Repeat tester data:

- Only individuals with complete data for two or more tests can be included in the analysis.
- There is a sizable number of seroconversions among individuals for whom risk information is missing, especially for men and for individuals whose gender is not specified.
- The method for assessing incidence based on repeat tester data changed in 2003, which may limit comparability with data presented in other earlier reports.

STAHRS data:

- Only blood tests (not oral) can be used for STAHRS testing.
- Less than thorough collection of IDU data in 1999 and 2000 and low numbers of transgendered testers may lead to inaccurate incidence estimates among these groups.
- There is a sizable number of seroconversions among individuals for whom risk information is missing, especially for individuals whose gender is not specified.

Other Secondary Data

DESCRIPTION

Existing data on teen birth rates, STDs, and other related information was assembled from various government departments. This data is collected on an ongoing basis and is generally based on information derived from service utilization (e.g., number of individuals diagnosed with STDs). Much of this data appears in Section III in the tables that depict indicators of HIV infection for the various BRPs. (HIV indicators are diseases or conditions known to public health officials to follow the pattern of the HIV epidemic.)

STRENGTHS AND LIMITATIONS

Service utilization-based data, while providing in-depth information about a broad range of health issues, is limited because it does not capture information about individuals who do not seek services. Individuals not connected to the service system may be affected even more strongly by these health issues, as they may not have access to health care due to lack of insurance or other reasons. Therefore, this data may be biased. Furthermore, some indicator data is very good for predicting HIV infection (e.g., STDs), but other indicator data is less reliable (e.g., teen birth rates).

Original Research

DESCRIPTION

HIV prevalence, HIV incidence, and behavioral studies, either published in peer-reviewed journals or unpublished, provide information about how HIV and AIDS are affecting various populations in San Francisco.

STRENGTHS AND LIMITATIONS

These studies provide a great deal of detailed information about HIV and AIDS in specific populations. Each study is potentially biased due to limitations related to sample size, sampling method, what issues the study examines or does not examine, or other factors. Each study must be assessed for validity on its own. Finally, special research studies are usually limited to one time period so they do not provide information on trends over time. The studies used in this chapter were based on sound science, and their strengths outweigh their limitations.

HIV Consensus Estimates

DESCRIPTION

In January and February of 2001, the SFDPH convened a panel of researchers, epidemiologists, and HIV/AIDS experts to bring together as much data on HIV as possible. This meeting was called the 2001 HIV Consensus Meeting. The panel presented and discussed findings from all the HIV data sources just described, as well as others. They used the range of findings in these studies to estimate HIV prevalence and incidence in different populations.

STRENGTHS AND LIMITATIONS

The incidence estimates derived from this meeting are considered the best available and most comprehensive because they draw on a number of data sources, taking into account their strengths and limitations. These are the estimates upon which San Francisco's priority populations are determined. Despite their strengths, these figures are only estimates. Further, the existing estimates are for 2001, although researchers believe they are still valid for 2002 and 2003. When HIV reporting data is complete, additional information on HIV incidence and prevalence will be available.

APPENDIX 2

Recent AIDS Cases (1999–2002)

Recent AIDS cases refers to the number of new AIDS cases diagnosed between January 1, 1999 and December 31, 2002. The following Exhibits depict recent AIDS cases by gender (Exhibit 21), race/ethnicity (Exhibit 22), age (Exhibit 23), and BRP (Exhibit 24). Overall, there has been a steady decline in the past four years in new AIDS diagnoses, largely due to HAART usage. There has been a corresponding increase in the number of PLWA, which increases the pool of infection, which in turn could contribute to new HIV infections.

EXHIBIT 21

Number of New AIDS Cases by Gender, San Francisco, 1999 – 2002

GENDER	1999		2000		2001		2002	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Male	559	88.4%	516	86.7%	482	88.6%	411	89.7%
Female	55	8.7%	62	10.4%	46	8.5%	36	7.9%
Transgendered	18	2.8%	17	2.9%	16	2.9%	11	2.4%
TOTAL	**632**	**100.0%**	**595**	**100.0%**	**544**	**100.0%**	**458**	**100.0%**

Source: AIDS Surveillance Quarterly Report, June 2003.
Note: Column totals do not match exactly for Exhibits 21-24 because for some categories, less than five AIDS cases were reported. The exact numbers are not reported to protect confidentiality.

EXHIBIT 22

Number of New AIDS Cases by Race/Ethnicity, San Francisco, 1999 – 2002

RACE/ETHNICITY	1999		2000		2001		2002	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
African American	117	18.5%	124	20.8%	110	20.2%	92	20.0%
Asian/Pacific Islander	31	4.9%	29	4.9%	34	6.2%	24	5.2%
Latino	106	16.8%	95	16.0%	68	12.5%	67	14.6%
Native American	5	<1%	5	<1%	<5	<1%	<5	<1.1%
White	373	59.0%	342	57.5%	328	60.2%	271	59.0%
TOTAL	**632**	**100.0%**	**595**	**100.0%**	**545**	**100.0%**	**459**	**100.0%**

Source: AIDS Surveillance Quarterly Report, June 2003.
Note: Column totals do not match exactly for Exhibits 21-24 because for some categories, less than five AIDS cases were reported. The exact numbers are not reported to protect confidentiality.

EXHIBIT 23

Number of New AIDS Cases by Age, San Francisco, 1999 – 2002

(YEARS)	1999		2000		2001		2002	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
0–19	<5	<1%	5	<1%	<5	<1%	<5	1.1%
20–24	8	1.3%	14	2.4%	7	1.3%	9	1.9%
25–29	40	6.3%	40	6.7%	37	6.8%	31	6.7%
30–39	281	44.4%	250	42.0%	221	40.4%	167	36.1%
40–49	219	34.6%	196	32.9%	185	33.8%	162	35.1%
50–59	67	10.6%	74	12.4%	72	13.0%	79	17.1%
60+	13	2.1%	16	2.7%	20	3.7%	9	1.9%
TOTAL	**633**	**100.0%**	**595**	**100.0%**	**547**	**100.0%**	**462**	**100.0%**

Source: HIV/AIDS Statistics and Epidemiology Section, special data request, August 2003.
Note: Column totals do not match exactly for Exhibits 21-24 because for some categories, less than five AIDS cases were reported. The exact numbers are not reported to protect confidentiality.

EXHIBIT 24

Number of New AIDS Cases by BRP, San Francisco, 1999 – 2002

BRP	1999		2000		2001		2002	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1. MSM, MSM/F	386	61.1%	352	59.0%	335	61.1%	293	63.6%
2. TSM, TSM/F, TSF	10	1.6%	7	1.2%	7	1.3%	6	1.3%
3. MSM-IDU, MSM/F-IDU	90	14.2%	80	13.4%	72	13.1%	59	12.8%
4. FSM-IDU, FSM/F-IDU, FSF-IDU	38	6.0%	37	6.2%	31	5.7%	20	4.3%
5. MSF-IDU	58	9.1%	63	10.6%	49	8.9%	40	8.7%
6. TSM-IDU, TSM/F-IDU, TSF-IDU	8	1.3%	10	1.7%	9	1.6%	5	1.1%
7. FSM, FSM/F, FSF	16	2.5%	24	4.0%	15	2.7%	16	3.5%
8. MSF	21	3.3%	19	3.2%	25	4.6%	17	3.7%
9. Other risk* (pediatric, transfusion)	5	0.7%	<5	<1%	<5	<1%	<5	<1.1%
TOTAL	**632**	**100.0%**	**597**	**100.0%**	**548**	**100.0%**	**461**	**100.0%**

Source: HIV/AIDS Statistics and Epidemiology Section, special data request, August 2003.
Note: Column totals do not match exactly for Exhibits 21-24 because for some categories, less than five AIDS cases were reported. The exact numbers are not reported to protect confidentiality.
*This category is the only one that includes cases from persons between ages 0 to 12. The other transmission categories include only individuals above 12 years of age.