

## **REPORT ON MSM AND IDU**

MSM = Men Who Have Sex with Men IDU = Injection Drug Users

## **California HIV Prevention Indicators**

# 2<sup>nd</sup> Edition

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## Forward

This report looks at California HIV Prevention Indicators as they pertain to MSM (Men Who Have Sex with Men) and IDU (Injection Drug Users). This report supplements a *Summary Report* which provides summary data for California overall. More detailed tabular information can be found in an accompanying *Detailed Data* report.

As much as possible, we have tried to provide information independently for both MSM and for IDU, and also for persons who are both MSM and IDU. Both the narrative and tabular data use the following abbreviations.

MSM IDU	Men Who Have Sex with Men who are also Injection Drug Users
MSM n-IDU	Men Who Have Sex with Men, but who are not Injection Drug Users
IDU n-MSM	Injection Drug Users who are not Men Who Have Sex with Men
MSM	Men Who Have Sex with Men (whether or not IDU)
IDU	Injection Drug Users (whether or not MSM)
All Other	Persons who are neither MSM nor IDU

In studying the indicator data, the reader should bear in mind that, while MSM are necessarily men, IDU can be either male or female.

For some of the indicators, the numbers for a group are too small for meaningful analysis of trends, and they are omitted from the presentation. In any case, where data are presented as percents and ratios, the reader should be cautious in interpreting large gyrations. Where the numbers are small, a minor change in the raw numbers can result in a large percentage change. Thus, the reader should refer to the *Detailed Data* report before making any firm conclusions about changes over time.

The information in this report is presented in parallel to the *Summary Report*, that is, each indicator is presented in the same order and with the same numbering as shown in the *Summary Report*. However, because data on MSM and IDU are not available for all indicators, some of the items are missing. This means that some of the indicator numbers may be skipped. For example, no meaningful data could be found for Indicator 2-2-1. So that number is passed over, and the next item presented is Indicator 2-2-2.

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#### Indicator 2-1-1: Number of Gay and Bisexual Men

**Category**: Populations

Domain: Numbers in High Risk Groups

Question: Men Who Have Sex with Men: How many are there?

- Why it's important: In California, men who have sex with men (MSM) have been at high risk for HIV infection since the inception of the epidemic.
- **How it's measured**: Adult males under age 65 were asked "Are you gay or bisexual?" in two statewide telephone sample surveys.
- **Findings**: The respective surveys found that 3.0% and 4.0% of adult males responded that they are gay or bisexual. The 95% confidence intervals ranged from 1.9% to 4.8%. Using figures from the AIDS KABB survey, the number of gay or bisexual adult males might range between 203,000 and 513,000 in the year 2000. Data from the CHIS for 2001 suggest a figure between 385,000-470,000 in the age 18-64 range.



**Strengths/Limitations**: Telephone surveys have a number of limitations, particularly in connection with sensitive questions. Also, the questions asked for self-identification as a member of a group, not about sexual behavior.

Sources: (1) AIDS KABB - Moskowitz JM, Henneman TA, Young Holt B. *California 2000 HIV/AIDS Knowledge, Attitudes, Beliefs, and Behaviors (KABB) Survey: Methods and Results.* Berkeley, CA: University of California, Berkeley, 2002. pp 25-27. (2) CHIS - Analysis of 2001 California Health Interview Survey by UCLA Center for Health Policy Research.

Acknowledgment: Nadereh Pourat

#### Indicator 2-1-2: Number of Injection Drug Users

**Category:** Populations

**Domain**: Numbers in High Risk Groups

Question: Injection Drug Users: How many are there?

Why it's important: Injection drug users (IDU) are at high risk for HIV infection.

How it's measured: Number of persons having a history in the past 12 months of illicit needle use who entered treatment at publicly funded or licensed alcohol or drug treatment programs.

Findings: The number of IDU entering treatment declined from 49,500 in 1992 to 36,700 in 2003.



- **Strengths/Limitations**: The measure does not satisfy. The numbers omit IDU who do not enter treatment during the year, and counts of those who enter treatment may reflect availability of services and propensity to enter treatment.
- Additional measures: As a percent of all persons entering treatment, IDU declined from 40% in 1992 to 22.4% in 2003. The HIV Counseling and Testing Program reports that 16,200 HIV tests (6.6% of all tests) were provided to IDU in 1995, a figure that climbed to 22,100 (11.2%) in 2003. The AIDS KABB statewide telephone survey yielded an estimate that 0.8% (95% CI: 0.3%-1.2%) of adults reported non-prescription injection drug use in the past 12 months, an estimate that suggests about 200,000 IDU in California. This figure is well below an expert consensus estimate of 300,000.
- Sources: (1) California Alcohol and Drug Data System (CADDS), California Department of Alcohol and Drug Programs. (2) Counseling and Testing Program Data, Office of AIDS, California Department of Health Services. (3) Moskowitz JM, Henneman TA, Young Holt B. *California 2000 HIV/AIDS Knowledge, Attitudes, Beliefs, and Behaviors (KABB) Survey: Methods and Results*. Berkeley, CA: University of California, Berkeley, 2002. pp 65-66. (4) Facer M, Ritieni A, Marino J, Grasso P, Social Light Consulting Group. 2001. *Consensus Meeting on HIV/AIDS: Incidence and Prevalence in California*. Office of AIDS, California Department of Health Services, p 16.

Acknowledgment: Sally Jew

#### Indicator 2-2-2: HIV Prevalence among Respondents in a San Francisco Street Survey

#### **Category**: Populations

**Domain**: Prevalence of HIV Infection

Question: How common is HIV infection among MSM populations?

Why it's important: The extent to which HIV is present in the community represents increased potential for new infections.

**How it's measured**: Persons who indicate they are HIV positive as a proportion of those who indicate HIV status in an ongoing street survey in San Francisco. Analysis is limited to those who reported African American, Asian/Pacific, Hispanic/Latino or White Non-Hispanic race/ethnic status.

**Findings**: The percentage who stated that they were HIV positive has changed little since 1997, with perhaps a small downward trend.



Sample Size: Findings are based on 84-447 individuals who said they were HIV positive during any 6month survey period.

**Strengths/Limitations**: The sampled method is based on a convenience of subjects. Findings are limited to persons who frequent survey locations, and the percentages cannot be interpreted as representing

HIV prevalence within the MSM community.

Details Available: See reports on Race/Ethnicity.

Source: Stop AIDS Project, San Francisco

Acknowledgment: Roop Prabhu, San Francisco Department of Public Health

#### Indicator 2-2-3: HIV Prevalence among HIV Counseling and Testing Program Clients

**Category**: Populations

Domain: Prevalence of HIV Infection

Question: How common is HIV infection among testing populations?

Why it's important: The extent to which HIV is present in the community represents increased potential for new infections.

**How it's measured**: Positive HIV tests as a proportion of tests in the HIV Counseling and Testing Program. Analysis excludes repeated positive tests for the same individual.

**Findings**: The percentage of tests that were positive was greatest among MSM IDU and, to a lesser extent, among MSM non-IDU. Percentages for both groups have trended downward. However, percentages among MSM IDU have increased since 2000.



Sample Size: The smallest group, MSM who are IDU, had 60-160 positive tests in any given study year.
 Strengths/Limitations: This indicator is useful for monitoring change in number of new infection, rather than for estimating the absolute number of new infections. Findings are limited to persons who make use of the program, and are influenced by availability of services and propensity to use them.
 Source: Counseling and Testing Program Data, California State Office of AIDS
 Acknowledgment: Nancy Berman Lees, Christine Dahlgren

#### Indicator 2-2-3: HIV Prevalence in Sexually Transmitted Disease Clinics

**Category:** Populations

**Domain**: Prevalence of HIV Infection

Question: How common is HIV infection among sexually transmitted disease clinic users?

Why it's important: The extent to which HIV is present in the community represents increased potential for new infections.

**How it's measured**: Positive HIV tests as a proportion of samples tested using specimens taken from sexually transmitted disease clinics at selected locations.

**Findings**: Following a long term decline, percentages for the MSM populations appear to have increased in the most recent study year.



**Sample Size**: The number of MSM who are IDU who were tested in any given year is small (84-140), and findings for that group should be interpreted with caution.

- **Strengths/Limitations**: This indicator is useful for monitoring change in number of new infection, rather than for estimating the absolute number of new infections. Findings are limited to locations sampled, and those locations tend to reflect communities where HIV infection is of greatest concern. Because the samples were drawn from persons testing for sexually transmitted diseases, findings cannot be generalized to the overall population.
- Source: California HIV Seroprevalence Annual Reports. Office of AIDS, California Department of Health Services

#### Indicator 2-3-1: Intent to Use Condoms for Anal Sex in a San Francisco Street Survey

Category: Populations

Domain: Values

**Question**: To what extent do MSM with a history of multiple partners and anal sex intend to use condoms for anal sex?

Why it's important: Unprotected anal intercourse is a common route for HIV infection.

**How it's measured**: Among MSM who indicate they had more than one sex partner in the past six months, and who practiced anal intercourse, the proportion who express intent to use condoms for anal sex in the coming six months.

Findings: The percentage who expressed intent to use condoms is high, but appears to have declined.



Sample Size: Findings are based on 346-646 individuals who met the study criteria during any six month period.

**Strengths/Limitations**: Findings from the convenience sample are limited to persons who frequent survey locations, and the percentages cannot be interpreted as representing condom usage within the MSM community.

Details Available: See reports on Race/Ethnicity.

Source: Stop AIDS Project, San Francisco

Acknowledgment: Roop Prabhu, San Francisco Department of Public Health

#### Indicator 3-1-2: Annual Volume of HIV Testing Services

Category: Interventions

Domain: Availability and Utilization

Question: To what extent are publicly funded HIV testing services available and utilized?

Why it's important: HIV prevention services effectively reduce the number of new HIV infections. How it's measured: Annual number of HIV tests provided under the HIV Counseling and Testing

Program.

**Findings**: While total testing volume decreased during the study period, the Counseling and Testing Program increased volume of services to the study populations.



**Strengths/Limitations**: The numbers shown do not include services provided by other prevention programs, nor testing in private medical care.

Source: Office of AIDS, California Department of Health Services

Acknowledgment: Nancy Berman Lees, Christine Dahlgren

#### Indicator 3-2-1: HIV Tests Where Clients Do Not Return for Results

Category: Interventions

Domain: Timeliness and Continuity

Question: To what extent are high risk populations aware of their HIV status?

Why it's important: The effectiveness of HIV counseling and testing services is improved when clients return for test results.

How it's measured: Percent of HIV tests under the HIV Counseling and Testing Program where clients do not return for test results.

**Findings**: In comparison to other groups, MSM non-IDU are much more likely to return for test results. However, percentages appear to be creeping upward for the MSM groups.



Sample Size: Among the smallest group (MSM IDU), 312-497 individuals did not learn test results in a given year.

**Strengths/Limitations**: Findings may reflect a change in the composition of program clients. **Source**: Office of AIDS, California Department of Health Services **Acknowledgment:** Nancy Berman Lees, Christine Dahlgren

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#### Indicator 3-2-2: Positive HIV Tests Where Clients Do Not Return for Results

Category: Interventions

Domain: Timeliness and Continuity

Question: To what extent are persons with HIV aware of their HIV status?

- Why it's important: The effectiveness of HIV counseling and testing services is improved when clients with HIV return for test results.
- **How it's measured**: Percentage of positive HIV tests under the HIV Counseling and Testing Program where clients do not return for test results.
- **Findings**: Among persons who test positive, the MSM non-IDU clients are much more likely to return for test results. Some improvement over time is noted for the IDU population. The reader should note that the large change for the MSM IDU group may be attributed to a small number of cases.



Sample Size: Among the smallest group (MSM IDU), 12-46 individuals did not learn test results in a given year.

**Strengths/Limitations**: Findings may reflect a change in the composition of program clients. **Source**: Office of AIDS, California Department of Health Services **Acknowledgment:** Nancy Berman Lees, Christine Dahlgren

# Indicator 3-2-3: Earliest Positive HIV Test Was Less than or Equal to Six Months before AIDS Diagnosis

Category: Interventions

Domain: Timeliness and Continuity

**Question**: To what extent are people with HIV aware of their status?

- Why it's important: When individuals with HIV are unaware of their HIV status, they are more likely to engage in behaviors that infect others.
- **How it's measured**: Number of AIDS diagnoses where the earliest positive HIV test was less than or equal to six months before the AIDS diagnosis, by year of AIDS diagnosis. Cases where earliest positive HIV test are unknown are excluded.
- **Findings**: For most groups, the numbers rapidly increased to a high in the early to mid-1990s, and then began to decline. Among the All Other group (neither MSM nor IDU), the numbers continue to rise, and this trend warrants continued monitoring.



**Strengths/Limitations**: The numbers in the earlier years should probably be disregarded, as those times were relatively chaotic and chances for error are great. For example, many people were diagnosed with AIDS and never had an HIV test and, thus, were not counted in this study. Numbers in more recent years seem more accurate. We would like to present these numbers as a percentage of all AIDS diagnoses. However, such an approach would be misleading because many individuals who forestall onset of AIDS with anti-retroviral therapy would not appear in the database until some future year.

**Source**: Office of AIDS, California Department of Health Services **Acknowledgment:** A. Nakamura

#### Indicator 3-2-4: Persons Successfully Referred by Outreach to HIV Counseling and Testing Program

Category: Interventions

**Domain**: Timeliness and Continuity

**Question**: To what extent does outreach encourage high risk populations to enter prevention services?

- Why it's important: Successful outreach with high risk populations helps the HIV Counseling and Testing program direct services toward those most in need.
- **How it's measured**: Percent of HIV tests in the Counseling and Testing program where the client indicates referral from outreach.
- **Findings**: A substantial proportion of IDU clients (both MSM and non-MSM) are recruited by outreach. A relatively small proportion of MSM non-IDU clients are recruited by outreach, perhaps because of general interest in testing on the part of the MSM population.



Sample Size: Among the smallest group, MSM who are IDU, findings are based on 195-304 successful referrals in any given year.

**Strengths/Limitations**: The reader should consider that outreach generally seeks out groups that do not otherwise participate in the Counseling and Testing Program. Such groups may include sex workers, and injection and non-injection drug users, among other high risk populations.

Source: Office of AIDS, California Department of Health Services

Acknowledgment: Nancy Berman Lees

#### Indicator 4-1-1: Counseling and Testing Program Clients with More than Five Sex Partners in Past Year

Category: Risk-Taking and Protective Behaviors

Domain: High Risk Sex

Question: To what extent do adult populations have multiple sex partners?

Why it's important: Having multiple sex partners increases the potential for HIV transmission.

- **How it's measured**: Of Counseling and Testing Program clients, percent with more than five sex partners in past twelve months.
- **Findings**: From 1995 through the year 2000, increasingly larger percentages of MSM and All Other clients had more than five recent sex partners. Beginning in 2001, the measure changed to number of sex partners in the shorter of past two years or since HIV test; and, from 2001 to 2003, the percentage for MSM continued to increase.



**Sample Size**: Among the smallest group, MSM who are IDU, findings are based on 495-967 individuals in any given year who reported more than five partners.

**Strengths/Limitations**: Findings may reflect a change in the composition of program clients, for example, a trend toward increased focus on high risk populations.

**Source**: Counseling and Testing Program Data, California State Office of AIDS **Acknowledgment**: Nancy Berman Lees, Christine Dahlgren

#### Indicator 4-1-2: Counseling and Testing Program Clients with Sex Partners who are Positive for HIV

Category: Risk-Taking and Protective Behaviors

Domain: High Risk Sex

Question: To what extent do adults have sex partners who are infected with HIV?

Why it's important: Having sex partners with HIV increases the potential for HIV transmission.

**How it's measured**: Of Counseling and Testing Program clients, percent with HIV positive sex partners in the shorter of past two years or since last HIV test.

Findings: While percentages remain high among the MSM groups, percentages have declined for all groups.



**Sample Size**: Among the smallest group, MSM who are IDU, findings are based on 256-692 individuals in any given year who reported having an HIV positive partner.

**Strengths/Limitations**: Findings may reflect a change in the composition of program clients. **Source**: Counseling and Testing Program Data, California State Office of AIDS **Acknowledgment**: Nancy Berman Lees, Christine Dahlgren

#### Indicator 4-1-4: Unprotected Anal Intercourse among MSM Respondents in a San Francisco Street Survey

Category: Populations Domain: Values Question: To what extent do MSM engage in unprotected anal intercourse? Why it's important: Unprotected anal intercourse is a common route for HIV infection.

**How it's measured**: Among MSM who indicate they practiced anal intercourse in the past six months, the proportion did not always use a condom.

Findings: Percentages have substantially increased over the years.



Sample Size: Findings are based on 950-2500 individuals in any given year who reported unprotected anal intercourse.

**Strengths/Limitations**: Findings from the convenience sample are limited to persons who frequent survey locations, and the percentages cannot be interpreted as representing condom usage within the MSM community.

Details Available: See reports on Race/Ethnicity.

Source: Stop AIDS Project, San Francisco

Acknowledgment: Roop Prabhu, San Francisco Department of Public Health

#### Indicator 4-1-5: Unprotected Receptive Anal Intercourse

Category: Risk-Taking and Protective Behaviors

**Domain**: High Risk Sex

**Question**: To what extent do those who engage in receptive anal intercourse neglect to use condoms? **Why it's important**: Failure to use a condom during anal intercourse substantially increases the risk of HIV transmission.

- **How it's measured**: Among Counseling and Testing Program clients who report receptive anal intercourse (RAI) in the shorter of the past two years or since last HIV test, percent who report not using a condom.
- **Findings**: Overall percentages are high. Increases over the study years among the MSM groups are mitigated by a decline in 2003. High percentages among IDU non-MSM and All Others are noted as both groups are, by definition, female. The number of individuals in these two groups constitutes 43% of the year 2003 clientele presenting with a recent history of URAI.



Sample Size: Among the smallest group, MSM who are IDU, from 551-867 individuals reported URAI in any given year.

**Strengths/Limitations**: Findings may reflect a change in the composition of program clients, for example, a trend toward increased focus on high risk populations. The data do not consider whether URAI was within monogamous relationships or with casual partners.

**Source**: Counseling and Testing Program Data, California State Office of AIDS **Acknowledgment**: Nancy Berman Lees

#### Indicator 4-2-1: Needle Sharing among Injection Drug Users

Category: Risk-Taking and Protective Behaviors

Domain: Needle Sharing

Question: To what extent do injection drug users share needles?

Why it's important: Needle sharing among injection drug users carries a risk of HIV transmission.

**How it's measured**: Among Counseling and Testing Program clients who report injection drug use (IDU) in the shorter of the past two years or since last HIV test, percent who report sharing needles.

Findings: Overall percentages are high, with a generally declining trend for both MSM and non-MSM.



**Sample Size**: Findings for the smaller group, MSM who are IDU, are based on 651-1232 individuals in any given year who reported a history of needle sharing.

**Strengths/Limitations**: Findings may reflect a change in the composition of program clients. The data do not consider whether needle sharing included bleaching of apparatus or sharing with exclusive partners.

**Source**: Counseling and Testing Program Data, California State Office of AIDS **Acknowledgment**: Nancy Berman Lees

#### Indicator 5-1-1: Number of New HIV Infections

Category: Disease Impacts
Domain: New Infections
Question: To what extent has number of new HIV infections changed over time?
Why it's important: Successful HIV prevention reduces the rate of new HIV infections.
How it's measured: Number of new HIV infections reported to the Non-Names HIV Reporting System by year of diagnosis.
Findings: 5,000 percent expected for the year 2002. Of reported ensert 57% were emerge MSM.

**Findings**: 5,090 new cases were reported for the year 2002. Of reported cases, 57% were among MSM non-IDU, and 30% were among persons who were not identified as either MSM or IDU.



**Strengths/Limitations**: Because the HIV reporting system is new, the extent of under-reporting is unknown.

**Source**: California State Office of AIDS, Non-Names HIV Reporting System **Acknowledgment**: A. Nakamura

#### Indicator 5-1-2: New HIV Cases Identified in the Counseling and Testing Program

Category: Disease Impacts

Domain: New Infections

Question: To what extent has the number of new HIV infections changed over time?

Why it's important: Successful HIV prevention reduces the rate of new HIV infections.

**How it's measured**: Number of positive HIV tests annually in the HIV Counseling and Testing Program among clients who have not previously tested positive.

**Findings**: The number of newly detected cases among MSM IDU declined over most years, but increased in 2003. The number among MSM non-IDU increased each year since 1999.



**Strengths/Limitations**: Recent increases may reflect improved outreach to higher risk populations. **Source**: Counseling and Testing Program Data, California State Office of AIDS **Acknowledgment**: Nancy Berman Lees, Christine Dahlgren

#### Indicator 5-1-1: New HIV Infections per 100 Person-Years at Risk

Category: Disease Impacts

Domain: New Infections

Question: To what extent has incidence of new HIV infection changed over time?

Why it's important: Successful HIV prevention reduces the rate of new HIV infections.

How it's measured: Number of positive HIV tests per 100 person-years at risk among Counseling and

Testing Program clients who state that they had a prior negative test and give the date of that test as at least two months ago and not more than 5 years ago.

**Findings**: Rates have been edging upward among all but the MSM IDU group. In earlier years, rates declined for the MSM IDU group, but sharply increased in 2003.



Sample Size: Findings for the smallest group, MSM who are IDU, are based on 29-84 positive tests in any given year.

Strengths/Limitations: Findings may reflect a change in the composition of program clients.

Measurement is limited to repeat testers, who are assumed to be at higher risk. The measure slightly underestimates the rate of new infections.

**Source**: Counseling and Testing Program Data, California State Office of AIDS **Acknowledgment**: Nancy Berman Lees

#### Indicator 5-1-5: HIV among Primary and Secondary Syphilis Cases

Category: Disease Impacts

Domain: New Infections

Question: To what extent are new HIV infection and new syphilis infections linked?

- Why it's important: Changes in the rate of new syphilis infections are believed to parallel changes in the rate of new HIV infections.
- **How it's measured**: Excluding cases where HIV status is unknown, the ratio of primary and secondary syphilis cases with a positive HIV test to cases with a negative HIV test.
- **Findings**: The ratio is high among the MSM population and appears to have increased. The ratio among the non-MSM group (including unknown orientation) is lower, but also has increased. The ratios for both groups decreased in 2003.



Sample Size: Findings for MSM are based on 73-560 HIV positive cases in any given year.

**Strengths/Limitations**: Measurement does not include cases that elude detection in the early stages. HIV status is unknown for large numbers of syphilis cases. Change over time might result from change in detection methods.

Sources: (1) Lo TQ, Samuel MC. State of California Syphilis Elimination Surveillance Data: Data through December 31, 2001. California Department of Health Services, Syphilis Elimination Branch. (2) Lo TQ, Samuel MC. State of California Syphilis Elimination Surveillance Data: Data through June 30, 2002. California Department of Health Services, Syphilis Elimination Branch. (3) Lo TQ, Samuel MC. State of California Syphilis Elimination Surveillance Data: Data through June 30, 2003. California Department of Health Services, Syphilis Elimination Branch.

#### Indicator 5-2-1: New Diagnoses of AIDS

Category: Disease Impacts

Domain: AIDS

Question: How many new cases of AIDS are diagnosed annually?

Why it's important: Over the longer term, HIV prevention reduces the number of new AIDS cases. How it's measured: Number of newly diagnosed AIDS cases by year of diagnosis.

**Findings**: Among the MSM and IDU populations, there were rapid increases up through 1992, followed by substantial declines in subsequent years. The All Other group (neither MSM nor IDU) did not experience the same decline.



**Strengths/Limitations**: The decline in the number of new AIDS cases since 1992 results from widespread use of anti-viral medications and tells us little about the current spread of HIV.

**Sources**: California Department of Health Services, Office of AIDS-HIV/AIDS Case Registry, August 31, 2004. Run Date: October, 2004.

Acknowledgment: A. Nakamura

#### Indicator 5-2-2: Number of Persons Living with AIDS

Category: Disease Impacts

Domain: AIDS

**Question**: How many people are living with AIDS?

Why it's important: The number of persons living with AIDS presents difficult public policy choices, particularly in regard to financing of AIDS-related services.

How it's measured: Number of persons living with AIDS at end of year.

**Findings**: The number of persons living with AIDS is increasing at a regular pace, and is estimated to approach 56,000 at the end of 2003. On a percentage basis, the 2002-2003 increase for All Others was greater than that for the MSM or IDU groups.



**Strengths/Limitations**: The estimated number of persons living with AIDS relies of the AIDS Case Registry and is calculated from annual new cases and annual reported deaths. Because reports of new cases and deaths are received on a continuing basis, all figures are subject to revision. The measure tells us little about the current spread of HIV.

**Sources**: California Department of Health Services, Office of AIDS-HIV/AIDS Case Registry, August 31, 2004. Run Date: October, 2004.

Acknowledgment: A. Nakamura

#### Indicator 5-2-3: Deaths of Persons with AIDS

Category: Disease Impacts

Domain: AIDS

Question: How many people with AIDS die each year?

Why it's important: Over the longer term, HIV prevention reduces the number of deaths among persons with AIDS.

How it's measured: Annual number of deaths among people with AIDS.

**Findings**: Following rapid increases up through 1994, the annual number of deaths for all groups fell rapidly.



Strengths/Limitations: The measure includes all deaths of persons with AIDS, and does not restrict to deaths as a consequence of AIDS. The rapid decline in the number of deaths after 1994 results from widespread use of anti-viral medications and, thus, tells us little about the current spread of HIV.
 Sources: California Department of Health Services, Office of AIDS-HIV/AIDS Case Registry, August 31, 2004. Run Date: October, 2004.

Acknowledgment: A. Nakamura