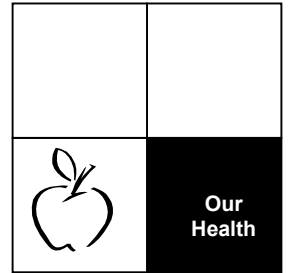


# San Francisco

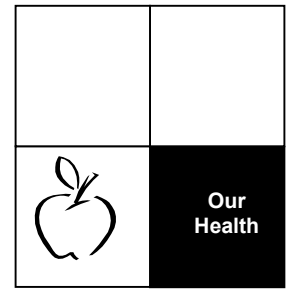


**Our  
Health**

# Introduction

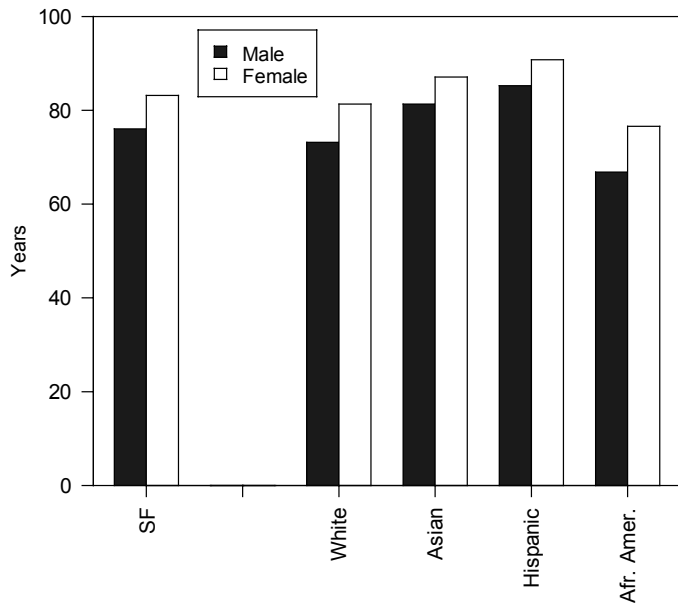


“Our Health” is a product of who we are and how, under what conditions, we live. The more successful we can be at creating conditions that promote our national health goals of increasing the length and quality of life and eliminating the disparities among groups, the lower will be the burden of death and disability, overall and due to specific health outcomes. In this section we look at indicators of health status, both overall and due to specific causes that are important contributors to or indicators of the overall burden of mortality, illness, injury and disability borne by our population.

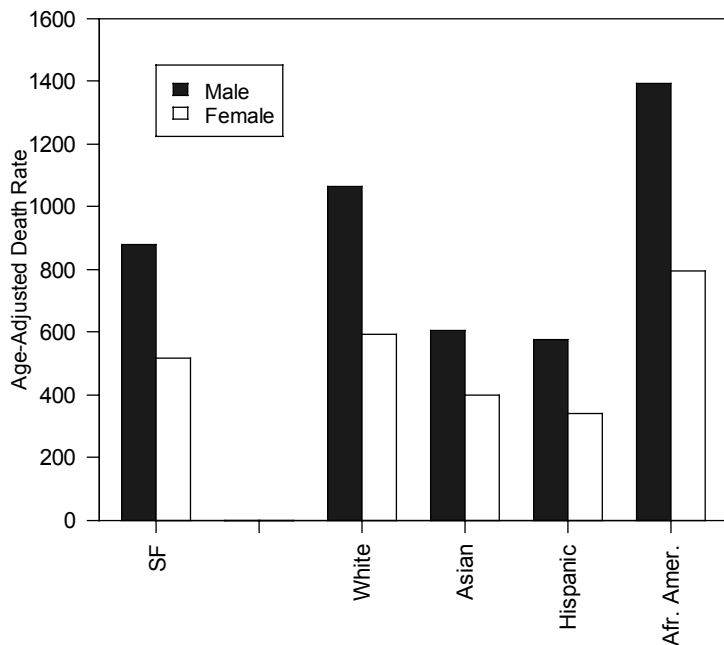


# Burden of Disease

**Life Expectancy at Birth by Sex and Ethnicity, San Francisco, 1999**



**Age-Adjusted Death Rates by Sex and Major Ethnicity Group, San Francisco, 2000**

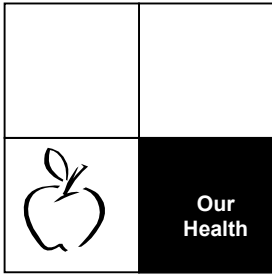


## MORTALITY

Life expectancy at birth is a measure of how long a baby born now could be expected to live if he or she grew up being subject to current mortality rates. As such it is a good summary measure of mortality differences in a group over time or among groups.

Life expectancy in San Francisco, as in California and the US, has been increasing in recent years. But as the figure shows, there are still marked disparities both across ethnicities and between men and women within each ethnicity. For each sex, Hispanics have the longest life expectancy, which means the lowest current mortality. African Americans have the lowest life expectancy and highest mortality for each sex, followed by whites.

Age adjusted death rates are another measure of the overall force of mortality, expressed in a way that allows comparisons across groups whose populations differ in size and age. These overall rates also show African American mortality to be highest for each sex, followed by that of white men and women. Asian and Hispanic mortality is the lowest. This profile of relative mortality among the major sex-and-ethnicity groups is not unique to San Francisco, but is also reflected in patterns for the state and for several surrounding counties.



# Burden of Disease

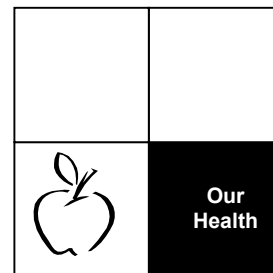
## Mortality—continued

This table shows the dramatic increase in death rates with age after the first year of life, and that male mortality is greater than that of females in every age group. This disparity is generally lowest during youth, when rates are lowest. It is most marked during the ages from 25 through 64, when men's greater mortality from AIDS, injuries, and homicide especially contribute to the differential. An earlier comparison of San Francisco's age-specific rates to those of California for 1996-1998 showed our rates to be higher than the state's for the ages 15-54, but otherwise equal to or lower than California's.

## Age-Specific Death Rates by Sex, San Francisco 1999

Ages	Male	Female	M/F Ratio
0-1	453.6	265.2	1.7
1-4	16.6	11.7	1.4
5-9	9.0	7.0	1.3
15-24	65.7	39.9	1.6
25-34	149.9	49.9	3.0
35-45	263.3	99.8	2.6
45-54	566.7	219	2.6
55-64	1051	493.7	2.1
65-74	2,070.3	1,177.2	1.8
75-84	5,084.7	3,141.0	1.6
85-	13,480.1	11,208.2	1.2

# Burden of Disease



## MAJOR CAUSES OF DEATH, SAN FRANCISCO & CALIFORNIA, 1999-2000

SF Rank	HEALTH STATUS INDICATOR	DEATHS (Ave./Yr.)	SAN FRANCISCO		CA		US	SF Met?
			DEATH RATE	95% CONF. LIMITS (LOWER, UPPER)	DEATH RATE	SF/CA	2010 Objective	
10	ALL CAUSES (1998-2000 AVERAGE)	6,587.3	698.4	(667.9 , 728.9)	773.8	0.90	N/E	--
22	CORONARY HEART DISEASE	1,544.0	159.2	(151.2 , 167.2)	201.5	0.79	166.0	Yes
26	CEREBROVASCULAR DISEASE	595.0	60.4	(55.5 , 65.2)	63.3	0.95	48.0	No
9	ALL CANCERS	1,515.5	165.0	(156.7 , 173.4)	179.8	0.92	159.9	No
6	LUNG CANCER	362.5	39.8	(35.7 , 43.9)	46.8	0.85	44.9	Yes
4	FEMALE BREAST CANCER	92.0	18.3	(14.5 , 22.1)	25.2	0.73	22.3	Yes
12	DIABETES	128.5	13.7	(11.3 , 16.1)	20.8	0.66	45.0	Yes
	AIDS	198.0	21.7	(n / a)	4.5	4.88		
27	UNINTENTIONAL INJURIES	281.5	32.7	(28.8 , 36.6)	24.7	1.32	17.5	No
12	MOTOR VEHICLE ACCIDENTS	54.5	6.8	(4.9 , 8.6)	9.8	0.69	9.2	Yes
24	SUICIDE	88.0	10.4	(8.2 , 12.6)	9.5	1.09	5.0	No
46	HOMICIDE	50.5	6.8	(4.9 , 8.8)	6.1	1.11	3.0	No
56	DRUG-RELATED DEATHS	158.5	18.2	(15.4 , 21.1)	5.8	3.14	1.0	No
14	FIREARM INJURIES	48.5	6.5	(4.6 , 8.4)	9.3	0.70	4.1	No

NOTES: Rank goes from lowest county rate (rank # 1) to highest rate (# 56).

Rates are age-adjusted to US 2000 population standard, and are calculated per 100,000 population.

Three-year averages are reflected for the "All Causes" mortality data.

Due to the change from ICD 9 to ICD 10 that occurred in 1999, two years of mortality data are used for specific causes.

Rates cannot be compared to data prior to 1999 due to the change from use of 1940 to 2000 standard population proportions to calculate age-adjustments.

SF/CA: SF rate/Ca rate x 100. Can be read as SF's rate as a percent of California's. Not shown if Ca. rate included in SF. N/E: National Objective for all-cause mortality for the Year 2010 has not been established.

Source: Department of Health Services: Center for Health Statistics, *County Health Profiles 2002*. April 2002.

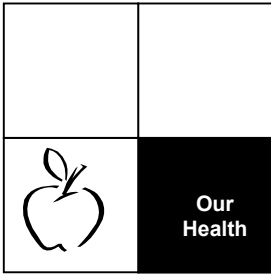
Data Sources: Department of Health Services: Center for Health Statistics, Death Statistical Master Files, 1998-2000.

Department of Finance: *1999 Population Projections with Age, Sex and Race/Ethnic Detail*, May 2000.

AIDS deaths from CDHS vital statistics query system.

### Mortality—continued

This table summarizes San Francisco's death rates overall and for selected important causes for 1999-2000, and how we are doing relative to California and to Healthy People 2010 National Objectives. The "SF/CA" column shows San Francisco's rate as proportion of California's, so a value less than one means we are doing better than the State as a whole. We are doing better overall (San Francisco's death rate is lower than the state's) and for most cases with the notable exception of AIDS, drug-related deaths, and injuries. The unintentional injury ratio is higher in San Francisco largely due to drug poisoning.

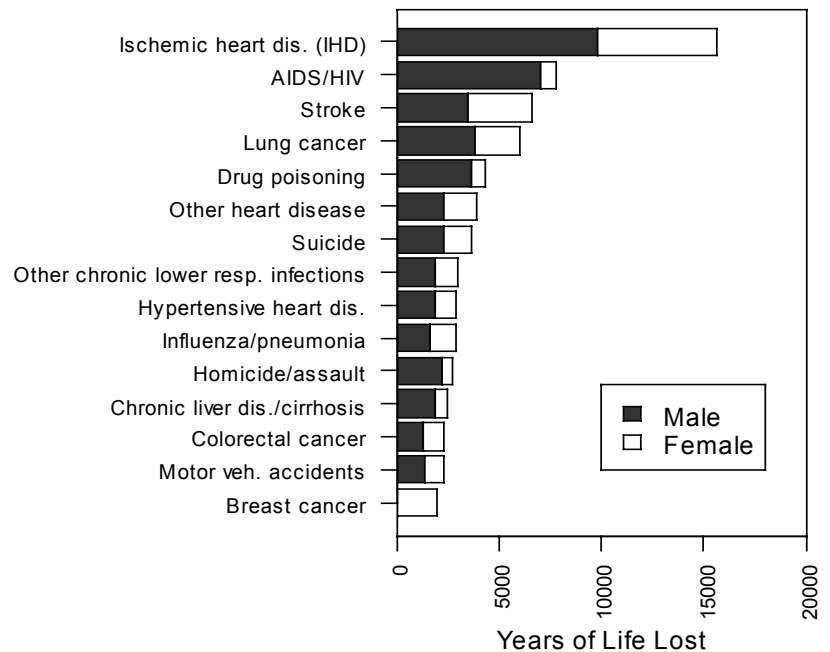


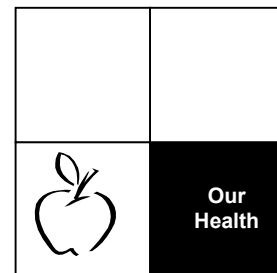
# Burden of Disease

## PREMATURE DEATH

SFDPH also analyzes premature mortality based on the measure of expected “years of life lost” (YLLs). This measure subtracts the person’s age at death from the life expectancy for someone that age in a standard population, so the younger the age at death, the greater the YLLs. Since many younger deaths could be prevented or postponed, this measure of premature mortality also emphasizes prevention. The figure shows the 15 leading specific causes of premature mortality for San Francisco for 2000. The leading cause is ischemic heart disease, followed by AIDS, stroke, lung cancer, and drug poisoning. AIDS and drug poisoning rank so high here because of a combination of the number of deaths involved, plus the fact that so many of them are to relatively younger people. Of the list of 15 causes, men contribute more YLLs to the total than do women for all but the 15<sup>th</sup> cause, breast cancer.

Leading Causes of Years of Life Lost, San Francisco, 2000





# Burden of Disease

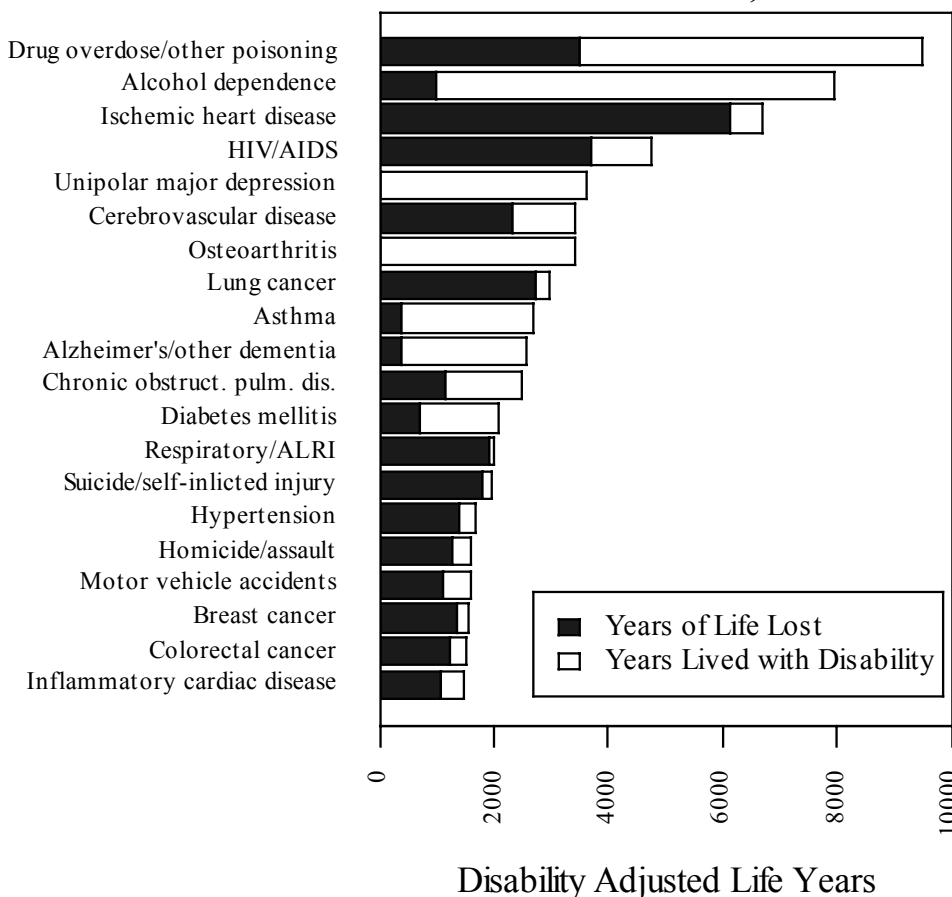
## DISABILITY ADJUSTED LIFE YEARS

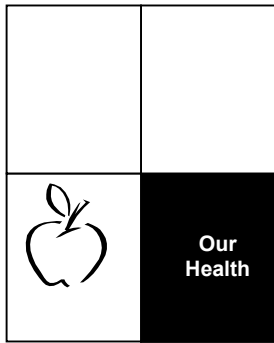
Disability Adjusted Life Years (DALYs) are a measure of the overall burden of disease and injury in a population. DALYs were developed by the World Health Organization and are a combination of years lost to premature mortality (years of life lost, YLL) and the number of years lived with a disabling condition (YLD). The measure allows health evidence to be used to estimate the largest contributors to reduced years of healthy life due to disease, injury, disability, and death.

In 1998, the two leading contributors to DALYs in San Francisco were drug overdose and alcohol dependence. These were also the leading causes of years of reduced health due to disabilities. Other leading causes of DALYs due primarily to disability and not represented by high mortality were depression, osteoarthritis, asthma, dementia, and diabetes.

Note: Due to technical reasons involving a change in 1999 to a new version of cause of death coding, DALYs could not yet be calculated for years after 1998. However, we chose to include this measure, even without the latest data, because of its importance as our one measure for estimating the overall burden of disease and injury in a population, and the relative importance of the specific conditions that contribute to it.

### Leading Causes of DALYs, San Francisco, 1998





# Burden of Disease

## Estimated Persons with Disabilities by Age and Sex, San Francisco 1999

	Number	No. w. Disability	w/o Disability	% w. Disability
<b>Male:</b>	348,470	55839	292631	16.0%
5 to 15 years:	38,301	1,402	36,899	3.7%
16 to 20 years:	19,919	1,154	18,765	5.8%
21 to 64 years:	245,942	34,521	211,421	14.0%
% Employed	78.3%	43.6%	84.0%	
65 to 74 years:	23,757	8,290	15,467	34.9%
75 years and over:	20,551	10,472	10,079	51.0%
<b>Female:</b>	357,593	64214	293379	18.0%
5 to 15 years:	37,831	1,234	36,597	3.3%
16 to 20 years:	18,391	1,010	17,381	5.5%
21 to 64 years:	235,626	31,539	204,087	13.4%
% Employed	71.3%	42.4%	75.7%	
65 to 74 years:	30,146	10,643	19,503	35.3%
75 years and over:	35,599	19,788	15,811	55.6%
<b>Total</b>	706,063	120,053	586,010	17.0%
5 to 15 years:	76,132	2,636	73,496	3.5%
16 to 20 years:	38,310	2,164	36,146	5.6%
21 to 64 years:	481,568	66,060	415,508	13.7%
% Employed	74.9%	43.0%	79.9%	
65 to 74 years:	53,903	18,933	34,970	35.1%
75 years and over:	56,150	30,260	25,890	53.9%

source: US Census, American Community Survey,

P26. SEX BY AGE, DISABILITY STATUS, AND EMPLOYMENT STATUS -

- Universe: Civilian noninstitutionalized population 5 years and over

### DISABILITY

This table provides estimates of the numbers of San Franciscans with disabilities, by sex and age group. The total is 120,000, about 17% of the population older than 5. This percentage increases sharply with age, as expected. Among those of prime working age, 21 through 64, almost 14% report having a disability. The employment rate among them is 43%, barely over half the 80% employment rate of non-disabled people this age.

These estimates are self-reported in the American Community Survey, and can be expected to differ from figures from programs such as SSI, which are based on examinations and program-specified disability criteria.

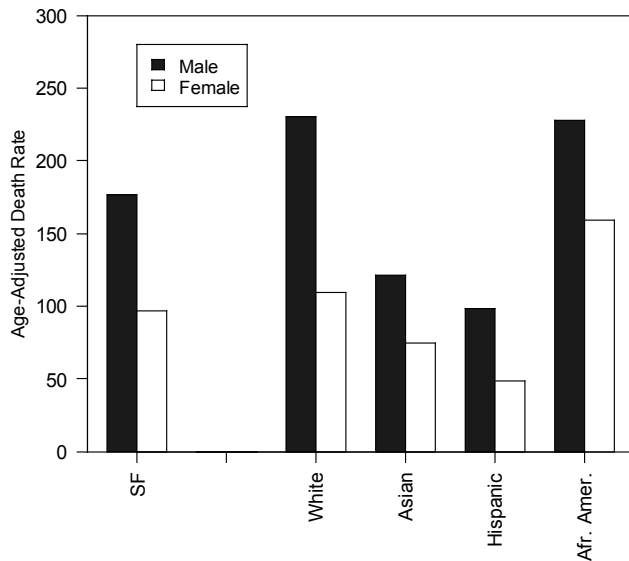


# Non-Communicable Disease

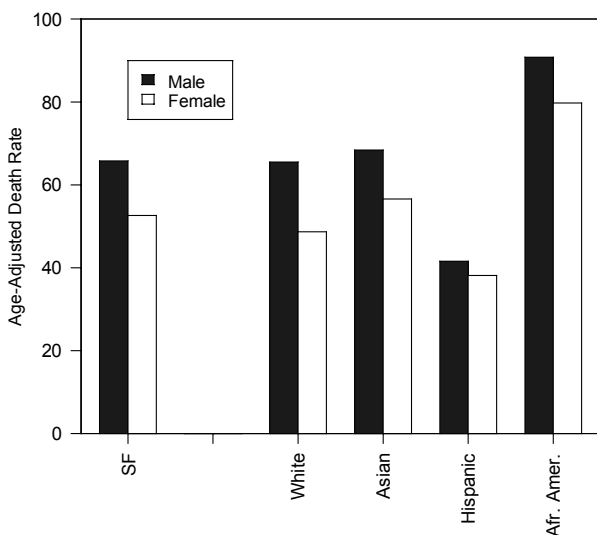


Our  
Health

**Age-Adjusted Ischemic Heart Disease Death Rates  
by Sex and Ethnicity, San Francisco, 2000**



**Age-Adjusted Stroke Death Rates  
by Sex and Ethnicity, San Francisco, 2000**



## CARDIOVASCULAR DISEASE

CVD has been the leading cause of death in the US every year since 1900 except 1918. In 1999 it killed almost a million people in the US, 40% of all deaths, including more women than men. An estimated 62 million Americans have some form of CVD, including high blood pressure (50 million), coronary heart disease, stroke, and congestive heart failure.

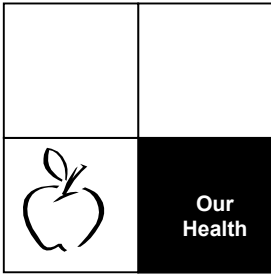
Ischemic heart disease (IHD, also called coronary heart disease) is the leading contributor of years of life lost for both men and women, and the leading cause of death in terms of both rates and numbers of deaths. San Francisco's rate for 1999-2000 combined was 159.2, compared to California's rate of 201.5 (see "Coronary Heart Disease" in "Major Causes of Death" table). IHD rates here, as elsewhere, have been declining, but there continue to be large disparities by sex and ethnicity. Rates for the year 2000 (upper figure) show that white and black men have much higher rates than Asian and Hispanic men. Among women, African Americans have the highest rates, followed by white women. Hispanic women have the lowest rates.

Smoking, diet (especially fats), lack of exercise, overweight, and stress are risk factors for IHD, and there is mounting evidence that dietary factors can start the disease process early in life. Interventions in any of these factors at any age can decrease risk.

Cardiac arrest can cause sudden death without immediate treatment; brain damage can occur in 4 to 6 minutes. Immediate cardiopulmonary resuscitation (CPR) by a trained bystander can help prevent this. Since about a quarter of cardiovascular disease deaths in the US occur before the person is gotten to the hospital, many such deaths could possibly be averted by more frequent, immediate interventions by trained bystanders, even before emergency medical technicians can arrive.

Cerebrovascular disease or stroke was the third leading cause of years of life lost in San Francisco in 2000. The stroke death rate for San Francisco in 1999-2000 was slightly below California's, 60.4 compared to 63.3 respectively. Our rates for the year 2000 (lower figure) show marked disparities, with stroke mortality rates highest for African American men and women, intermediary for white and Asian men and women, and much lower for Hispanics.

Tobacco, physical inactivity, poor diet, and drugs are among the risk factors for stroke. Fatalities from strokes that do occur could be reduced if more people recognized the warning signs and sought immediate help when they occurred.



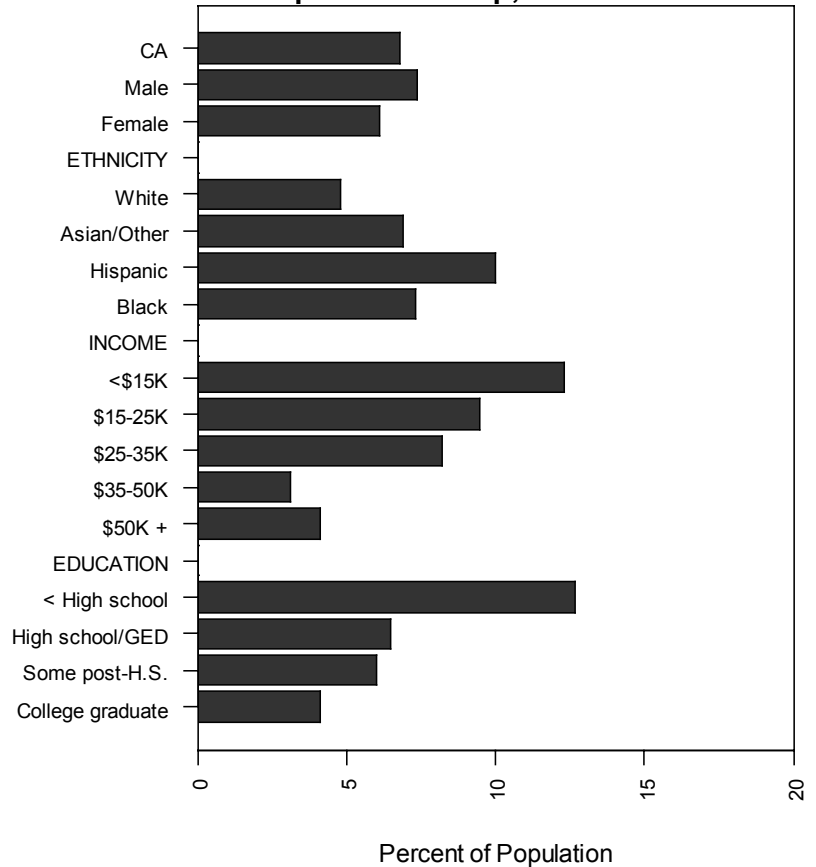
# Non-Communicable Disease

## DIABETES

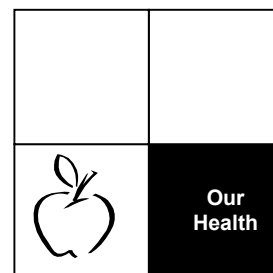
Diabetes ranked 12<sup>th</sup> among San Francisco's leading causes of disability adjusted life years. People with Diabetes are 2 to 4 times as likely to die from coronary heart disease and twice as likely to die from stroke as people without diabetes. More than 80% of people with diabetes die from some form of cardiovascular disease.

California diabetes prevalence figures show a sharp gradient by income and education; the less of each, the higher the prevalence of diabetes. Hispanics also have much higher prevalence than the other major ethnicities, about double that of whites, who are the lowest.

**Estimated Diabetes Mellitus Prevalence by Population Group, California 2000**



# Non-Communicable Disease



## CANCER

For this period (1995-1999), prostate cancer was the leading cause of new cancer cases among men, and breast cancer among women, overall and for all ethnicities. However, lung cancer (about 90% of which is attributable to exposure to tobacco smoke) was the leading cause of cancer mortality for both sexes and for all ethnicities. Among females, invasive breast cancer had almost triple the incidence of lung and colorectal cancers, but the death rate from lung cancer was twice that of colorectal cancer, and a third higher than breast cancer. Among males, there was almost twice the rate of prostate cancer as lung cancer, and more than twice the rate of colorectal cancer. But lung cancer mortality was over twice the rate for both colorectal and prostate cancer. (continued on next page)

### Leading Causes of New Cancer Cases by Sex and Ethnicity, San Francisco 1995-1999

SF Rank	Site	No. of Cases	SF Rate	95% Conf. Intvl LCI , UCI	Ethnicity-Specific Rates			
					White	Afr.-Amer.	Latino	Asian/P.I.
<b>MALE</b>								
	All cancers	10,940	567.5	556.8 , 578.3	666.2 **	803.1 ***	401.1	386.8
1	Prostate cancer	2,814	149.8	144.3 , 155.5	169.5 **	267.1 ***	108.3	87.7
3	Lung cancer	1,485	78.9	74.9 , 83.1	80.0 *	143.9 ***	44.9	70.0 *
4	Colorectal cancer (invasive)	1,196	64.3	60.6 , 68.1	69.2 *	83.9 *	39.0	60.3 *
5	Non-Hodgkin's lymphoma	805	38.3	35.7 , 41.1	53.9 ***	33.0 *	27.9 *	15.3
8	Kaposi's sarcoma	641	27.4	25.3 , 29.7	39.4 *	35.0 *	24.3 *	3.7
6	Bladder cancer	463	25.1	22.8 , 27.5	38.1 ***	18.6	15.0	9.9
9	Mouth/oropharynx cancers	418	21.0	19.0 , 23.2	24.1 *	26.7 *	13.2	18.0
13	Liver cancer	341	17.3	15.5 , 19.3	11.7 *	20.7	13.7 *	25.8
11	Stomach cancer	297	16.2	14.4 , 18.1	13.1	31.2 *	20.3	16.0
12	Leukemia	262	14.0	12.3 , 15.9	17.2 *	16.6	8.9	10.1
<b>FEMALE</b>								
	All cancers	9,073	382.2	374.2 , 390.4	472.5 ***	392.1 **	272.1	295.5
2	Breast cancer (invasive)	2,775	122.0	117.4 , 126.7	163.0 ***	115.3 **	72.6	83.2
4	Colorectal cancer (invasive)	1,130	44.1	41.5 , 46.9	46.3 *	44.8	30.8	44.4 *
3	Lung cancer	1,054	42.3	39.7 , 45.0	54.9 *	53.9 *	23.1	30.4
7	Breast cancer ( <i>in situ</i> )	655	29.8	27.2 , 32.3	36.2 *	33.6 *	14.9	24.6 *
10	Corpus uteri cancer	523	22.7	20.8 , 24.8	28.3 *	21.1	15.6	18.2
16	Ovarian cancer	345	15.2	13.6 , 17.0	21.4 ***	10.4	11.6	9.6
5	Non-Hodgkin's lymphoma	338	14.1	12.6 , 15.7	15.4	14.2	15.2	10.8
19	Cervix uteri cancer	223	10.0	8.8 , 11.5	8.2	12.5	14.3	10.3
14	Pancreas cancer	219	8.3	7.2 , 9.5	8.8	12.7 *	9.0	6.1
6	Bladder cancer	208	8.1	7.0 , 9.4	10.6 *	8.2	6.0	5.1

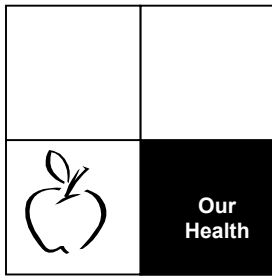
\*\*\* Rate is significantly higher than all other ethnicities of same sex

\*\* Rate is significantly higher than next highest ethnicities of same sex

\* Rate is significantly higher another ethnicity of same sex

No. of cases is 5-year new case count, 1995-1999.

Rates are annual average age adjusted rates per 100,000 population, adjusted to US standard 2000 population



# Non-Communicable Disease

## Cancer—continued

There are important differences by sex and ethnicity in cancer incidence and mortality, both overall and for specific cancer sites. African Americans had the highest overall incidence among men, and whites among women (due largely to higher breast cancer incidence). But mortality rates overall were significantly higher for African American men and women than for the other ethnicities, with whites second highest.

From 1995 through 1999, the top 5 causes of cancer incidence and mortality for both men and women stayed the same as they'd been in last year's report, covering 1993 through 1997. Over that period Kaposi's sarcoma dropped from the 3d to the 5<sup>th</sup> rank for incidence in males, and prostate cancer mortality dropped from 2d to the 3d leading cause of cancer mortality among males. For women, the causes and ranks remained unchanged for both incidence and mortality. Note however that rates shown here cannot be compared with earlier reports, because of the use of a new standard for age adjustment (see Technical Notes).

## Leading Causes of Cancer Mortality by Sex and Ethnicity, San Francisco 1995-1999

SF Rank	Site	No. of Deaths	SF Rate	95% Conf. Intvl LCI , UCI	Ethnicity-Specific Rates			
					White	Afr.-Amer.	Latino	Asian/P.I.
<b>Males</b>								
	All cancers	4,081	221.2	214.4 , 228.2	244.3 **	372.0 ***	161.0	171.1
1	Lung cancer	1,093	59.0	55.5 , 62.6	61.5 **	108.8 ***	36.7	48.7
2	Colorectal cancer	437	24.3	22.1 , 26.8	28.2 *	35.2 *	14.8	19.1
4	Prostate cancer	399	23.4	21.1 , 25.8	27.7 *	61.6 ***	17.3	10.0
7	Liver cancer	243	12.4	10.9 , 14.1	8.0	18.6 *	12.3	17.7 *
6	Non-Hodgkin's lymphoma	209	10.8	9.4 , 12.4	14.7 *	7.8	8.6	6.3
5	Pancreas cancer	183	9.8	8.4 , 11.4	11.1 *	15.3 *	11.1	6.5
8	Stomach cancer	178	9.8	8.4 , 11.4	7.1	19.9 *	12.8	10.6
9	Leukemia	157	8.6	7.3 , 12.9	11.4 *	13.7 *	4.1	5.6
11	Esophageal cancer	120	6.4	5.3 , 7.7	7.3	13.0	--	5.2
12	Brain & N.S. cancer	97	4.9	4.0 6.1	6.0	5.5	3.9	3.3
<b>Females</b>								
	All cancers	3,565	138.9	134.2 , 143.7	165.9 **	199.5 ***	93.7	102.2
1	Lung cancer	792	30.7	28.6 , 33.0	38.9 *	48.1 *	14.0	21.8
3	Breast cancer	525	21.7	19.8 , 23.7	28.6 *	36.2 *	13.6	11.1
2	Colorectal cancer	421	15.3	13.9 , 17.0	17.0 *	19.3 *	5.6	15.1
5	Pancreas cancer	202	7.5	6.5 , 8.7	8.6 *	12.6 *	5.6	5.0
10	Ovarian cancer	176	7.3	6.2 , 8.5	10.2 *	6.5	6.6	3.8
6	Non-Hodgkin's lymphoma	145	5.4	4.5 , 6.4	6.3	5.7	5.2	3.9
9	Leukemia	133	5.2	4.4 , 6.3	7.4	6.6	3.7	3.4
8	Stomach cancer	121	4.6	3.8 , 5.5	3.4	4.8	6.0	5.2
7	Liver cancer	85	3.4	2.7 , 4.3	1.6	3.7	3.6	5.7
18	Corpus uteri cancer	85	3.3	2.6 , 4.1	3.8	6.5 *	1.9	1.9

\*\*\* Rate is significantly higher than all other ethnicities of same sex

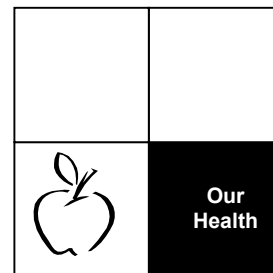
\*\* Rate is significantly higher than next highest ethnicities of same sex

\* Rate is significantly higher than another ethnicity of same sex

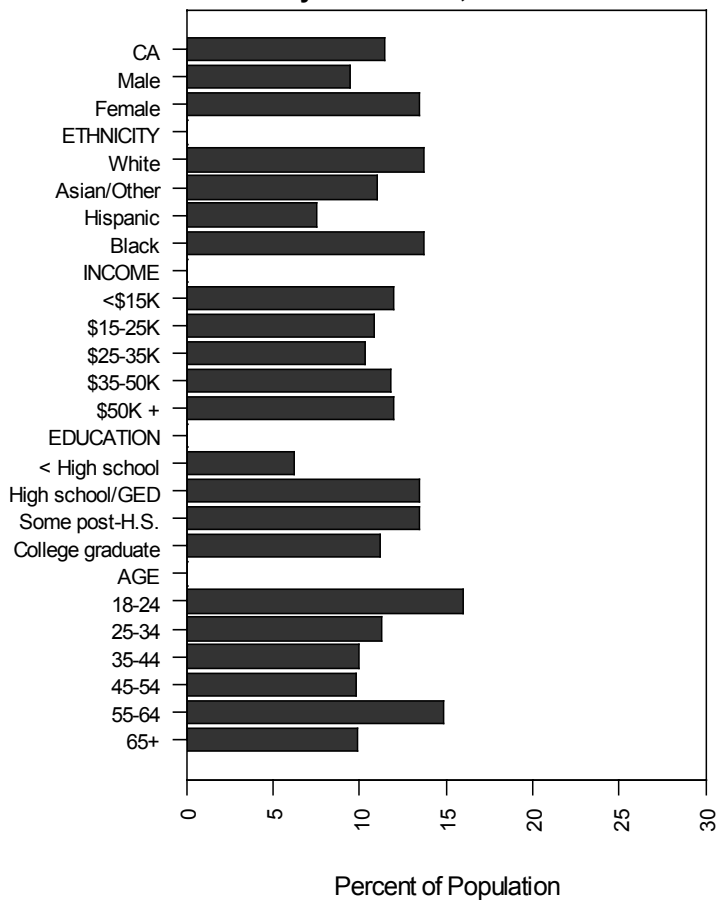
No. of deaths is 5-year death count, 1995-1999.

Rates are annual average age adjusted death rates per 100,000 population, adjusted to US standard 2000 population

# Non-Communicable Disease



**Prevalence of San Franciscans Ever Told by a Doctor They Had Asthma, California 2000**



## ASTHMA

Asthma ranked 9<sup>th</sup> among contributors to overall burden of disease, in 1998 DALYs.

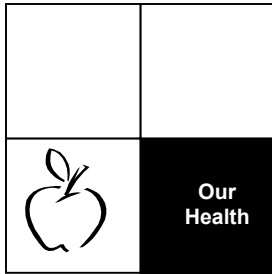
Nationally, prevalence of asthma has been reported to have increased significantly during the past decade.

Prevalence rate estimates for California, shown in this figure, were about 11.5% overall in 2000. It indicates highest prevalence among whites and blacks, about twice that of the lowest group, Hispanics.

Asthma hospitalization rates for both the City and the state, however, show something different. African

Americans had the highest hospitalization rates (1995-1997: rate of 664 per 100,000 for children under 14, and 463 for all ages), and Hispanics were next highest for (rate of 351; see last year's *Overview*).

Asthma hospitalizations are considered one of the "ambulatory care sensitive" diagnosis, meaning causes of hospitalizations that are in significant part preventable with better access to and use of primary care. Long-term environmental interventions, along with medical management, can significantly reduce the burden of asthma.



# Communicable Disease

AIDS Cases by Transmission Category, Gender, Ethnicity, and Year of Diagnosis, San Francisco, 1990-2001

Transmission Category	Number of Cases					1997-2000 Change	
	1990	1993	1997	2000	2001*	No.	%
MSM	1846	1790	640	340	253	-300	-47%
IDU	123	179	123	94	66	-29	-24%
MSM IDU	305	299	104	75	56	-29	-28%
Lesbian IDU	4	7	3	2	1	-1	**
Hemophiliac	2	2	0	0	0	0	**
Heterosexuals	26	17	23	28	13	5	22%
Transfusion	13	17	3	3	0	0	**
Other	11	39	15	12	18	-3	**
Pediatric (0-12)	4	4	3	1	0	-2	-67%
<b>Gender</b>							
Male	2267	2248	831	485	360	-346	-42%
Female	67	106	60	61	35	1	2%
Transgender			23	12	12	-11	-48%
<b>Ethnicity</b>							
White	1766	1689	588	325	232	-263	-45%
African Am.	261	321	168	110	94	-58	-35%
Latino	223	338	120	93	54	-27	-23%
Asian/PI	69	71	34	25	23	-9	-26%
Native Am.	15	23	4	5	4	1	**
<b>Total</b>	<b>2334</b>	<b>2354</b>	<b>914</b>	<b>558</b>	<b>407</b>	<b>-356</b>	<b>-39%</b>

\* Cases reported may not be complete in later years.

For this reason, changes calculated for year 2000 rather than 2001.

\*\* Percent change not reported for <20 cases.

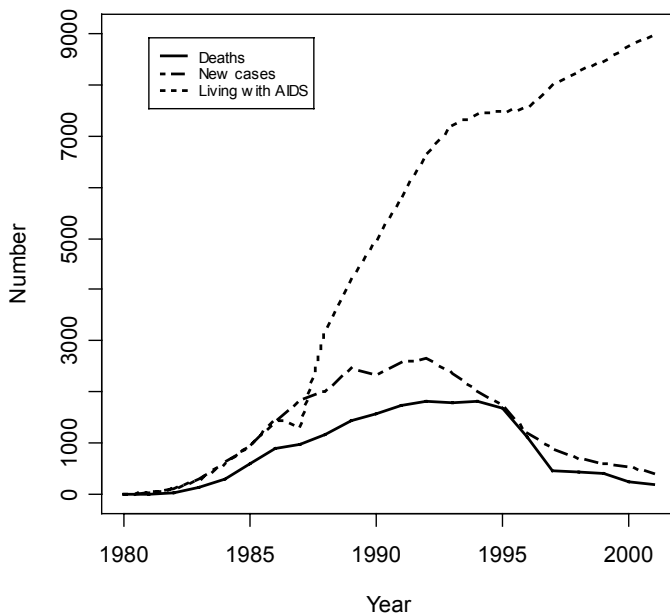
source: Quarterly AIDS Surveillance Report, AIDS Cases Reported Through December 2001. SFDPH, Jan. 2002

## HIV/AIDS

AIDS deaths and newly diagnosed cases continue to decline from the early 1990s, continuing the benefit from combination therapy on survival. However, the drop in cases has leveled off in recent years. Moreover, sexual risk behavior, STDs and HIV incidence have been increasing in men having sex with men (MSM). Data on intravenous drug user and heterosexuals indicate stable to slightly declining HIV transmission.

Increases in survival occurred among all groups with AIDS, but median survival was somewhat greater among Latinos than other ethnicities, men than women, and non-injection drug users. (IDUs). Worse survival among IDUs may reflect increased mortality from other causes as well as less use of antiretroviral therapy.

Deaths, New Cases, and Numbers Living with AIDS, San Francisco, 1980-2001

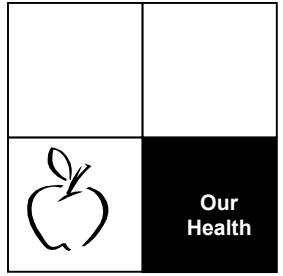


Median Months of HIV Survival after AIDS illness diagnosis by risk, gender, race/ethnicity, and Year of Diagnosis, San Francisco, 1987-1998

No. of Cases	Years		
	1987-89	1990-94	1994-98
<b>Risk Category</b>			
MSM	19	17	63
IDU	15	16	37
MSM + IDU	17	16	45
Other	15	16	56
<b>Gender</b>			
Male	19	17	59
Female	16	18	56
<b>Ethnicity</b>			
White	19	17	62
African Am.	15	16	43
Latino	18	17	65
Other	18	19	53
<b>Total</b>	<b>19</b>	<b>17</b>	<b>59</b>

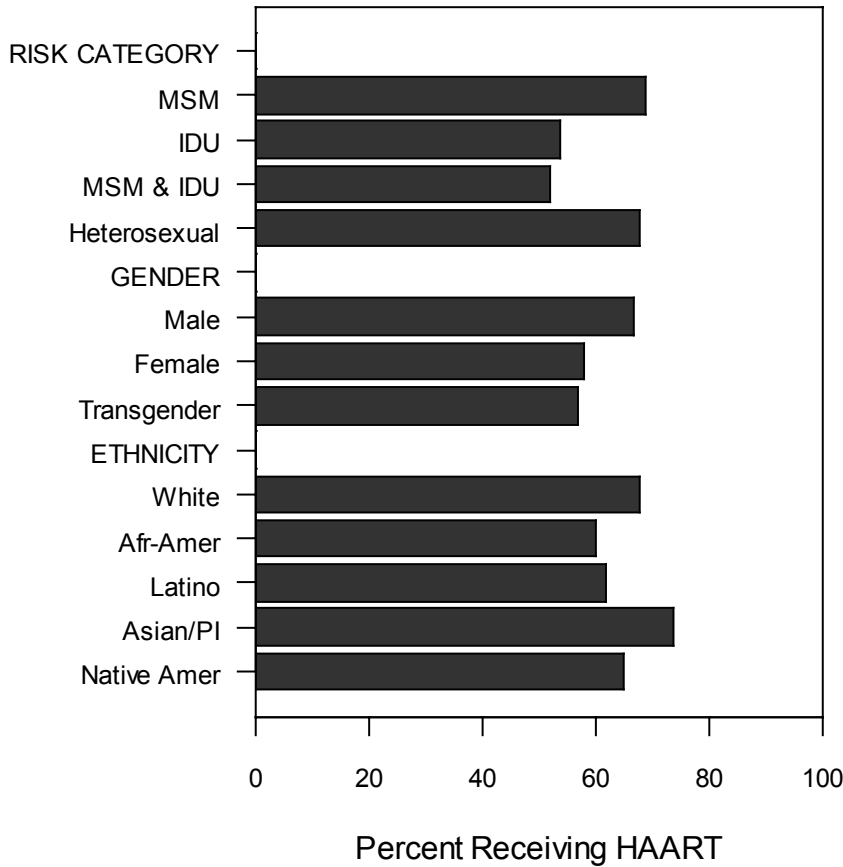
source: HIV/AIDS Epidemiology Annual Report, 2000. (Nov. 2001)

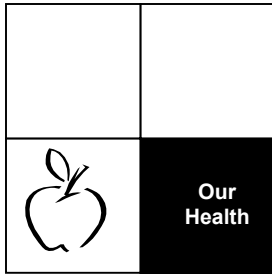
# Communicable Disease



**HIV/AIDS—continued**  
 Highly Active Anti-Retroviral Therapy (HAART) use increased survival for all groups, but “was more common among MSM and heterosexuals with AIDS than among heterosexual and homosexual injection drug users.”

**HAART Use Among Persons with AIDS  
 San Francisco, December 2000**





# Communicable Disease

## Sexually Transmitted Diseases among San Francisco Residents, 1998-2001

Disease	Number of Cases				Change, 2000-2001	Rates*				Change, 2000-2001
	1998	1999	2000	2001		1998	1999	2000	2001	
Gonorrhea: All groups	1,843	1,608	2,163	2,039	-6%	240.5	208.4	278.9	262.5	-6%
White	688	553	810	842	4%	203.2	163.3	245.2	248.5	1%
Asian	57	64	91	106	16%	23.5	25.8	39.2	42.0	7%
Hispanic	179	192	282	211	-25%	166.1	176.8	283.0	192.7	-32%
African American	605	568	569	521	-8%	909.4	869.9	899.0	813.2	-10%
Adolescents (<20)	244	256	231	187	-19%	504.4	532.7	483.8	364.0	-25%
M. rectal gonorrhea	158	159	201	237	18%	40.7	41.4	51.2	not avail.	
Chlamydia	2,601	2,723	3,113	3,007	-3%	339.5	353.0	400.5	387.1	-3%
Adolescents (<20)	883	850	968	764	-21%	1825.5	1768.7	2027.3	1487.2	-27%
Syphilis	137	132	163	300	84%	17.9	17.1	21.4	not avail.	
Early syphilis	41	44	72	190	164%	5.4	5.7	9.1	24.5	169%
Congenital syphilis	1	1	1	1	--	--	--	--	--	

Rates are cases per 100,000 population per year, based on 2000 census.

\* Note: 1998-2000 rates differ from earlier calculations, because they were re-calculated based on new census data.

2001 figures are provisional until release of annual report.

sources: SFPDPH, "SF Monthly STD Report, Data for Dec. 2001 (Jan. 2002);

*San Francisco Sexually Transmitted Diseases Annual Summary, 2000 (Nov. 2001).*

web: [www.dph.sf.ca.us/sfcityclinic](http://www.dph.sf.ca.us/sfcityclinic)

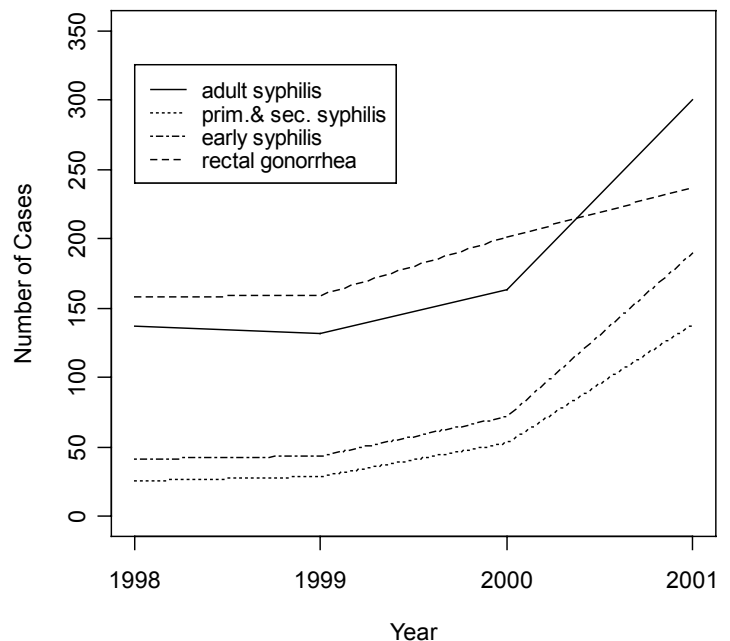
### SEXUALLY TRANSMITTED DISEASE

Increases in syphilis and rectal gonorrhea cases seen from '99 to '00 continued in 2001. These thought to be concentrated among MSM

Gonorrhea cases, which rose sharply in 2000, stayed high in 2001. These are thought to be concentrated among both MSM and also among young heterosexual men and women in SE part of city.

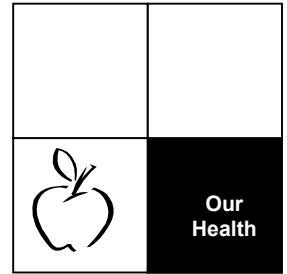
Chlamydia also increased over the previous 6 years, thought to be due to both increased screening (chlamydia screening of sexually active women aged 15-25 was adopted as a HEDIS "quality of care indicator") and also increased prevalence.

### Recent STD Cases in San Francisco, 1998-2001





# Communicable Disease



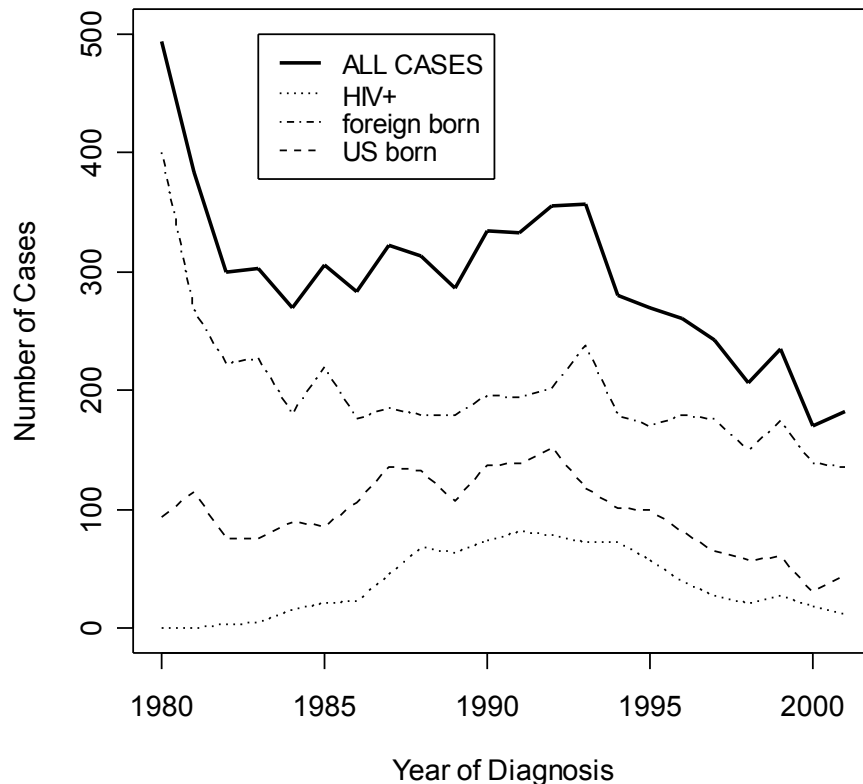
## TUBERCULOSIS

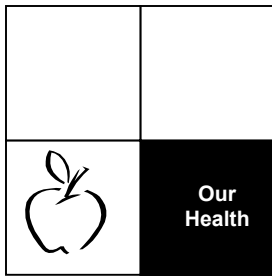
After a decade of declining numbers, in 2001 there was a slight increase in cases, to 182—still the second lowest number of cases (after 2000) in the past 20 years. Our rate (23.4 per 100,000) is still 4 times the national average (5.8 in 2000). Three-quarters of new cases continue to occur among the foreign-born (90% of which have immigrated from China, the Philippines, and Southeast Asia). The increase in 2001 was largely due to an increase from 31 to 46 in the number of native-born cases.

The average age of new cases has been increasing; 61% of new cases in 2001 were older than 44. Rates are highest among Asians, have been declining among Hispanics and whites, but jumped for African Americans from 2000 to 2001.

The number of cases co-infected with HIV continued to decline, to 13 cases (7%) in 2001. The proportion of reported drug users also has fallen over the past 7 years, to 13% overall (including alcohol) in 2001 (4% injecting drugs). One in eight cases (13%) reports being homeless. Resistance to at least one drug increased in 2001, to 22%. Four cases (2%) showed multi-drug resistance; none of these acquired drug resistance in this country.

### Tuberculosis Cases in San Francisco, 1980-2001





# Communicable Disease

## HEPATITIS C

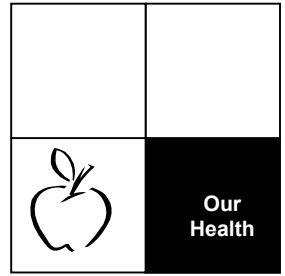
Hepatitis C virus (HCV) is infectious, remains silent (without symptoms) for years, and has high incidence in the population. It can cause long-term disability through liver disease.

Many of the risk factor for HCV are the same as those for HIV transmission. This table provides updated prevalence estimates for San Francisco by risk group.

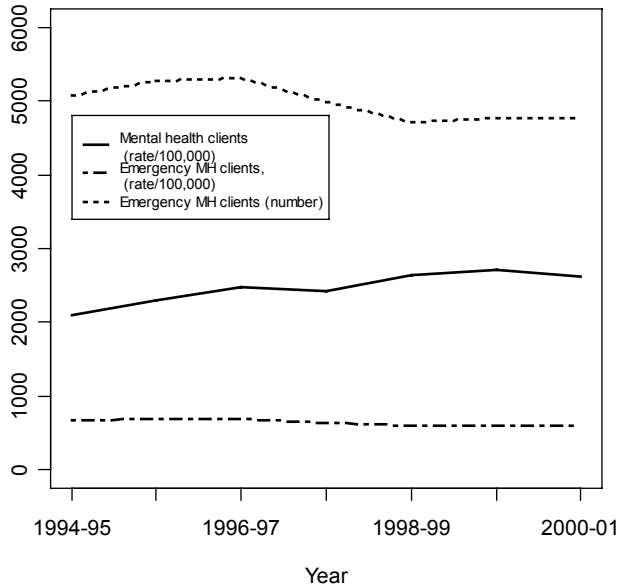
### Hepatitis C Prevalence Estimates by Risk Group, San Francisco 2001

Risk group	Estimated Prevalence		Risk group prevalence	Risk group number	SF Prevalence	
	Low	High			Low	High
general population	0.015	0.023		794,342	11,915	18,270
IDU	0.72	0.86		18,672	13,444	16,058
STD history	0.01	0.10	0.17	135,038	1,350	13,504
abnormal ALT	0.10	0.18	0.05	39,717	3,972	7,149
multiple sex partners						
2-9 sex partners	0.01	0.02	0.52	333,421	3,334	6,668
10-49 sex part.	0.03	0.03	0.22	141,063	4,232	4,232
50+ sex part.	0.06	0.16	0.04	25,648	1,539	4,104
Pre-1990 transfusion	0.05	0.09	0.06	47,661	2,383	4,289
MSM	0.02	0.18	0	67,632	1,353	12,174
Health care workers	0.01	0.02	0.09	71,491	715	1,430
Others				53,264	236	755

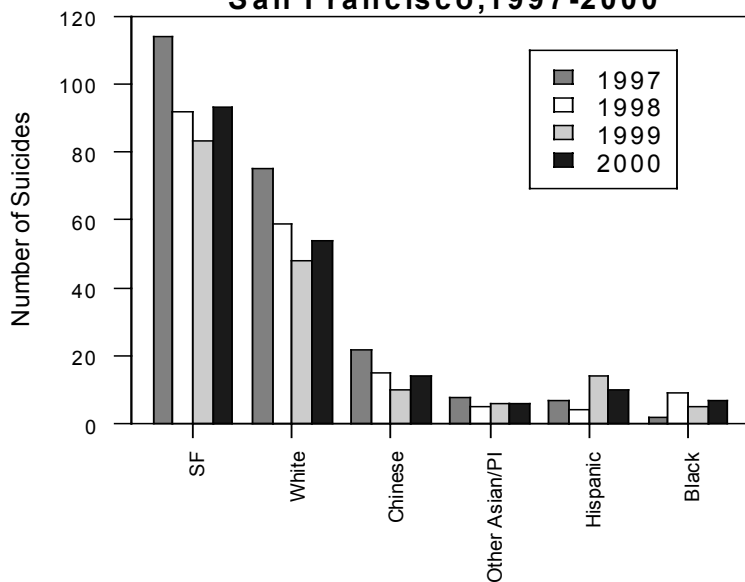
# Mental Health



**Public Health Mental Health Clients, San Francisco, 1994-95 through 2000-01**



**Suicides by Ethnicity, San Francisco, 1997-2000**



**MENTAL ILLNESS**

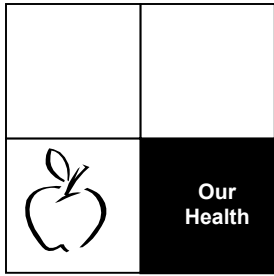
We still lack good local estimates of the prevalence of mental health disorders in San Francisco. Estimates for the whole U.S. population over age 18 are that in a given year, about 22% have a diagnosable mental disorder, including 9.5% with a depressive disorder (5% having a major episode in any year), bipolar disorder and schizophrenia each occurring in slightly over 1%, and about 13% with an anxiety disorder.\* A large but unknown proportion of people with mental disorders do not get timely treatment; many lack access to or do not seek treatment.

Treatment is available through SFDPH for many of those with the most serious needs for treatment.

Data for this part of the population shows that while the number and rate of clients served by DPH went up between 1994 and 2001, there was a decrease in the number of clients who had a crisis episode. San Francisco offers three psychiatric emergency services— San Francisco General Hospital, Westside Crisis Clinic and Mobile Crisis Treatment Unit.. Preventing crisis episodes has been one of Community Mental Health’s primary goals.

These data may reflect an increased focus on more intensive outpatient and case management services, to allow clients to get the treatment they need before a crisis occurs.

\*Source: NIMH, “The Numbers Count: Mental Disorders in America”, pub no. 01-4584, Jan. 2001.  
Source: SFDPH, CMHS

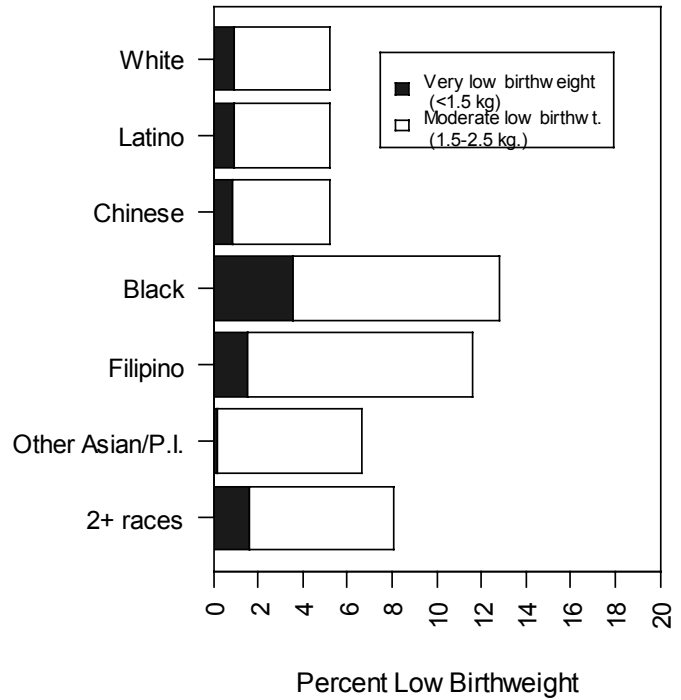


# Maternal and Child Health

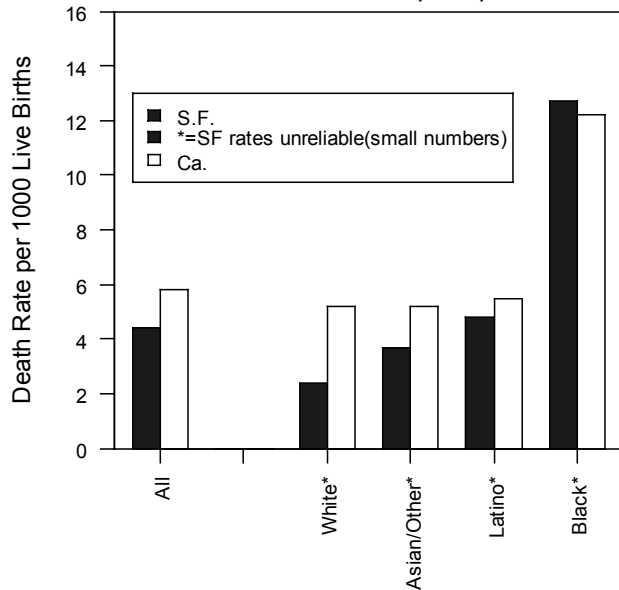
**LOW BIRTH WEIGHT**  
 Low birth weight (birth weight less than 2500 grams) increases infants' risk of infant mortality and other health problems, and very low birth weight (birth weight less than 1500 grams) increases these risks even more. In San Francisco, the highest rates of low and very low birth weight babies are born to African American women, although this declined somewhat in 2000, from over 15% in 1999.

**INFANT MORTALITY**  
 Infant mortality is widely considered to be a core indicator of a community's health status. The overall infant mortality rate for San Francisco is lower than that for California as a whole. Small numbers of deaths makes comparing rates by ethnicity inherently unreliable, even for several years of data. However, the data for San Francisco do show that African American infant mortality continues to be elevated compared to other groups, comparably to ethnic-specific infant mortality differences for the state.

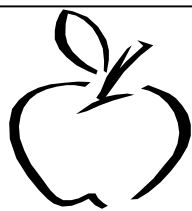
**Low Birthweight by Mother's Ethnicity, San Francisco, 2000**



**San Francisco and California, 1996,1997 and 1999**



# San Francisco



**Technical  
Notes**

# Technical Notes

## General Notes on Data

### Variability and uncertainty in data

All measures of events occurring in populations are subject to a variety of sources of uncertainty, including random variability. This means there is a certain unsystematic variability inherent in whether an event (like a death) occurs at a specific time. This variability is inversely related to the number of events, so it is greater for very few events, and relatively much less when many events are involved. Therefore rates based on very few events are considered unstable and unreliable, and are typically not reported. In general, in this report we do not show rates calculated for less than 5 events.

### Confidence intervals

Confidence intervals are a way to quantify the reliability of rates and other measures. The 95% confidence interval is the interval within which we expect that, if the procedure producing our measure were repeated exactly the same way 100 times, the “true” underlying population rate would be expected to occur in the confidence intervals of 95 of those sets of data—and outside it in the other 5. Rates that are compared can be considered significantly different if their confidence intervals do not overlap.

Many reports, including those of state and federal agencies, also use standard error or relative standard error as a guide to reliability, not reporting rates or percents with a relative standard error greater or equal to 23%, or where the standard error is indeterminate because there are zero events. “NC” and/or missing bars of data on graphs indicate that rates or prevalence figures were not calculated because there were insufficient data to do so reliably for that category.

### Rates

Rates are expressions of how many events (such as death or disease) occur per unit of population size in a given time period. Because rates standardize the size of the populations being compared and the time frame of the comparison, they are preferable to raw numbers for comparing the degree of mortality or illness in a population over time or across populations.

For example, consider two populations. Population A has 100 deaths in a year among 100,000 people, and population B has 200 deaths among 500,000 people. By numbers of deaths, B has twice as many deaths (200 to 100), but by rates, mortality in B is only 40% as high as in A (rates are, for B,  $200/500,000=40$  deaths per 100,000 population; for A:  $100\text{ deaths}/100,000=100$  deaths per 100,000). Rates also allow us to compare chances of events in different populations, and say that someone in A has 2.5 times the chance of dying as someone in B ( $100/40$  deaths per 100,000 in A compared to B).

### Age-adjusted rates

Rates calculated as the total number of events divided by the total population are called crude rates. But because most health rates change with age (after the first year of life, death rates generally go up with increasing age), we also have to account for comparisons of populations with different age distributions. (Intuitively, we'd expect to treat fifty deaths in a retirement community of 1000 people in a year differently than the same number of deaths among the same number of children in an elementary school, because we know that the death rates of very old people are normally much greater than the death rates of children.) Therefore we use a method called age-adjustment to “adjust for” differences in both the size and age distribution of populations; the resulting age-adjusted rates are synthetic figures, but can be used to compare the overall degree or force of mortality or morbidity across populations with different age distributions and sizes.

Direct age adjustment is done by weighting age-specific rates from a given population by the proportional age distribution of a standard population, and summing these weighted rates across the age groups.

Age-adjusted rates can only be compared if they are adjusted to the same population standard. The most common standard used in recent years has been the US 1940 standard population, which has now (since 1999) been replaced by the US 2000 standard population. Because the US population has gotten older, the 2000 standard gives greater weight to older age groups, and rates adjusted to the year 2000 standard will therefore be greater than those that used the 1940 standard. The difference between the two will be proportional to the extent that mortality among older age groups is greater than that among younger ones.

When 1997-1999 deaths are adjusted to the old and new standard population, the results are:

San Francisco: 1940 standard: 403.2; 2000 standard: 719.9

California: 1940 standard: 415.0; 2000 standard: 791.5

(Ca. Dept. Health Services, *County Health Status Profiles 2001*, p. 72)

These differences in death rate results from the same data using different population standards illustrate the importance of only comparing rates adjusted to the same population standard. **Note that all death rates cited in this 2002 Overview are adjusted to the US 2000 standard population, while almost none in earlier years were. Therefore it is not appropriate to compare the actual death rates cited here to those from earlier years' Overviews.**

# Technical Notes

## Race/ethnicity

Because there are very commonly disparities in rates or other measures across race/ethnicity groups, it remains important for us to monitor and report health-related conditions by these categories. Race and ethnicity are problematic categories from a “data point of view”: because we cannot really tell people, or say, what exactly they really refer to. But we need to use them because they show us about real differences. So, data collectors generally try to let people self-select their own categories. Hopefully, this has not been too great a problem as long as it has been done the same way in all the data used.

However, the 2000 census began allowing people to select multiple racial categories, and other federal and state data sources, including vital records, will do the same. This leads to many practical problems in data analysis, including how to code and report people listing multiple race/ethnicity categories. The general approach has been to remove them from individual group categories and report them separately, as “more than one race”. This has an unknown effect on the continuity of data for race/ethnicity populations over time, since in the past all those people would have been included as one race/ethnicity category (including “other”) or another. Practically, this is likely to decrease the size of almost all ethnicity groups somewhat, compared to past measures. Since these population estimates are essential for calculating rates, proportions, life expectancies, and so on, this change will introduce another source of uncertainty into our calculations and make comparisons over time more difficult. The informed consumer of data is advised to be aware of this, and that data analysts are still working on the best ways to cope with this change.

The “more than one race” category for San Francisco in the 2000 census was 4.3%, and 3% for the non-Latino population.

Race/ethnicity as used here is generally (unless otherwise specified) a combination of what are called the “ethnicity” question (are you Hispanic/Latino or not?) and the “race” question (are you white, black, Native American, any of a series of Asian/Pacific nationalities, etc.). The standard way to uniquely classify all individuals using these two questions is to assign all checking Hispanic ethnicity to that category, and then to allocate everyone *else* according to their selected “race”. The results are often referred to as race/ethnicity, and the categories called Hispanic/Latino, white non-Hispanic (NH), Asian NH, black NH, etc. The “NH” suffix is then usually dropped for simplicity.

## Mortality

**Data sources.** Most of the mortality data used in this report comes from the state’s master death file, which includes cause of death coding done by the state Office of the Registrar. This data includes deaths to San Francisco residents, regardless of where they occur, plus deaths occurring in San Francisco to people whose place of residence cannot be established (thus including the homeless).

**Measures of mortality.** The two main mortality measures used in this report are rates and years of life lost. Rates are discussed above. Years of life lost are calculated as the difference between the age at death and the life expectancy for a person of that age. This life expectancy comes from a standard life table based on an optimal population. For a detailed discussion of our methods, see *San Francisco Burden of Disease and Injury: Mortality Analysis, 1990-1995* (December 1998) on our website at [www.dph.sf.ca.us](http://www.dph.sf.ca.us)

**Cause of death coding.** Causes of death through 1998 were coded in categories of the International Classification of Diseases, 9<sup>th</sup> Revision (ICD-9). Starting in 1999, deaths have been coded in the new revision of the international classification system, ICD-10. The new system differs from the older one in several ways, including having many more cause categories, being an alphanumeric rather than numeric system, and having different coding rules in some cases. The National Center for Health Statistics has established several different cause of death groupings for ICD-10, none of which is exactly comparable to the categories used for reporting under ICD-9 coding. Therefore causes of death reported from 1999 on cannot routinely be assumed to be the same as those reported through 1998 (even if the categories have the same name), without comparing the old codes and coding rules to the new ones to see if they are indeed comparable. No such comparisons of data across these coding systems are made in this report unless the equivalency of cause categories has been established (e.g., with motor vehicle deaths).

## Notes on Overview Data

### Who We Are

The California Dept. of Finance Demographics Research Unit produces official state population estimates and projections. Their latest full projection series (December 1998) was used for county demographic data reported by age, sex and ethnicity, and for calculating population-based rates. These estimates have still been used for population-based calculations such as rates.

Ethnicity from birth records refers to mother’s ethnicity.

# Technical Notes

Census data were used as noted where available, principally for demographic information. The “more than one race” part of the population are not included in the ethnicity counts reported.

Since year 2000 socio-economic information has not yet been released by the census, for those we relied on the Census Bureau’s American Community Survey (ACS), a series of surveys done in selected counties in the US throughout 1999. This method, intended to replace the census long form by 2010, is to be implemented throughout the country in the next decade to collect ongoing socio-economic information which will be made available via the internet. Since it is a survey, data reported from the ACS should be interpreted cautiously, as should any population survey data. Next year we expect to have more detailed socio-economic data available from the census itself.

San Francisco Unified School District includes about three-fourths of San Francisco’s school children, much lower than the statewide proportion of about 90% of school children enrolled in public schools.

## How We Live

**Economic conditions.** The federal poverty threshold was developed in the 1960s, to estimate minimum income needed for subsistence, based on housing costs of 30% of income. It is adjusted annually for inflation, but not regionally for local differences in cost of living. Thresholds vary by household size and composition. They are published annually by the Bureau of the Census and used for statistical compilations of poverty rates. The thresholds differ slightly from the federal poverty guidelines, published annually by the Dept. of Health and Human Services, which are used to determine eligibility for federal means-tested programs.

Children from families earning up to 185% of poverty are eligible for free or reduced school lunches. When schools pass a threshold percent of their students who are eligible, all students at the school become eligible for free or reduced lunches.

The California Budget Project calculated minimum comfortable cost-of-living levels by region for families with two children (one pre-school age) and either two working parents, two parents one of whom works, a single parent who is working, or a single adult.

**Substance abuse.** Data on hospitalizations are from the Patient Discharge Data files of the Office of Statewide Health Planning and Development (OSHDP). The graph shows any drug-and-alcohol-related diagnoses. (The first diagnosis is the principle reason for the hospital admission.) The table of expanded diagnoses includes hospitalizations with any diagnosis (there can up to 24 diagnoses coded per hospitalization) that is alcohol-or-drug-related. Alcohol-or-drug-related -diagnoses are directly attributable to alcohol or drug use, and do not include other diagnoses that such use may have contributed to (e.g., alcohol contributing to injury from a fall). The state has tracked such expanded diagnoses since 1997.

Recent local estimates have not been developed for many health and social conditions. Rather than continue to report ever-older San Francisco data, we have chosen to report more recent California data, including Behavioral Risk Factor Survey (BRFSS) information on smoking, physical inactivity, overweight, nutrition, oral hygiene, and asthma and diabetes prevalence. The reader is referred to last year’s Overview for the older (but still latest available) San Francisco estimates for some of these. New estimates covering all of these areas for San Francisco and some of its sub-populations should be available next year from the California Health Interview Survey.

**Unintentional injuries.** Data on injuries coming from the San Francisco Office of Medical Examiner (ME)(deaths) and California Highway Patrol (motor vehicle collision injuries) generally refer to deaths or injuries that occurred in San Francisco, regardless of place of residence of the injured persons. For this reason, some injury mortality counts shown here may not match injury death data from state data files, such as is shown in parts of the “Our Health” section or in other reports.

**Access to health care.** Estimates of the uninsured for SF and other metropolitan areas are derived from the Current Population Survey (CPS) and other national surveys, none of which are specifically designed to produce such local area estimates. However, in the absence of current surveys designed to make such estimates for San Francisco, these have been the best available sources for data to estimate the local level of access to health insurance. Next year the California Health Inventory Survey (CHIS) is expected to provide more reliable local estimates of access to health insurance, as well as numerous other health-related issues for which timely local data have not been available.

Immunization coverage data come from retrospective studies in sampled kindergartens. Therefore 1999 data are for children who started school in September 1998, were born in 1993-1994, and turned two in 1995-1996, while 1996 data refer to immunization status of children who turned two in 1992-1993.



# Technical Notes

## Our Health

Mortality reported in this section is from state health files, for San Francisco residents, unless otherwise noted.

**Burden of disease.** DALYs are calculated by applying established rates of disabilities or ratios of years lived with disability (YLDs) to years of life lost (YLLs) to San Francisco mortality data. These YLD rates and ratios were constructed by the WHO Global Burden of Disease and Injury project, using data from established market economy societies, in a complex process (see CJL Murray and AL Lopez, ed. *The Global Burden of Disease: A Comprehensive Assessment of Mortality and Disability from Diseases, Injuries, and Risk Factors in 1990 and Projected to 2020*, Volume 1 of *The Global Burden of Disease Series*. Harvard School of Public Health on Behalf of World Health Organization and the World Bank, Boston, 1996).

DALY “years” shown here have been adjusted by discounting and age-weighting, and so are not comparable to the unadjusted years of life lost reported by ethnicity, or to unadjusted YLLs in other Department of Public Health reports, including prior years’ Overviews.

Because YLLs are not adjusted for differences in the size and age structure of the different ethnic populations, numbers of YLLs cannot be directly compared across these groups.

All mortality data from 1999 on are coded using the new ICD-10 classification and groupings, with rates age-adjusted to the year 2000 standard. Because “Major Causes” reported in prior years of Overviews were based on ICD-9 coding and the 1940 age standard, this year’s rates in this table cannot be compared to those from prior years (see discussion under **Mortality** above).

**Non-communicable disease.** New estimates for prevalence for heart disease, diabetes, and hypertension should be available next year from the California Health Interview Survey.

Cancer incidence and mortality data come from Surveillance, Epidemiology and End Results (SEER) system, an active surveillance system which identifies cases and then follows them over time.

**Communicable disease.** AIDS deaths shown in the graph are deaths to persons identified as having AIDS in the SFDPH AIDS Surveillance System. Since this system identifies people who are in San Francisco at the time of their diagnosis with AIDS, numbers of deaths from this source will differ somewhat from the state master file, which includes only people identified as San Francisco residents at the time of death.

The risk groups shown in the table of estimates of hepatitis C prevalence include categories whose members may overlap. Therefore the prevalence estimates by risk group cannot be summed to produce an overall prevalence estimate without multiple-counting cases of people who fall into more than one risk category. Hepatitis C incidence is reported for the first time in the state’s *County Health Status Profiles 2001*, but the data reported there (and for 2002) for hepatitis C for San Francisco are not valid, because they are based on very incomplete reporting.

A copy of this report can be downloaded from the San Francisco Department of Public Health’s web page at: <http://www.dph.sf.ca.us>