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Introduction

The San Francisco Department of Public Health is pleased to present you with its annual overview of health in San Francisco. As in past years, we release this report in honor of Public Health Week, April 2- 6, 2001. The overview provides our broadest view of the health and well-being of our community and is intended to contribute to the best evidence on health conditions and needs in San Francisco.

This year's overview includes the latest data available about important aspects of the health and well-being of our population. In addition, we continue to expand our information about the major conditions that contribute to the patterns of health, illness and injury in San Francisco. Furthermore, we have tried to present data that will be useful for thinking about prevention activities: by showing disparities across groups, determinants of ill health, trends over time, comparisons to state or national levels or national standards, or by choosing measures of premature death or disability.

The overview is organized into three sections. "Who We Are" provides a demographic view of the age and ethnic distribution of our population. "How We Live" presents information on conditions that are known to be major determinants of health in populations, including poverty, socioeconomic conditions, air pollution, crime, substance abuse, and risky behaviors. "Our Health" covers major physical and mental health outcomes.

The Field Model of Health

Our approach is governed by a broad concept of health and well-being. The factors that contribute to health and well-being in our population are described in the following "Field Model."

Multiple -Determinants of Health Model
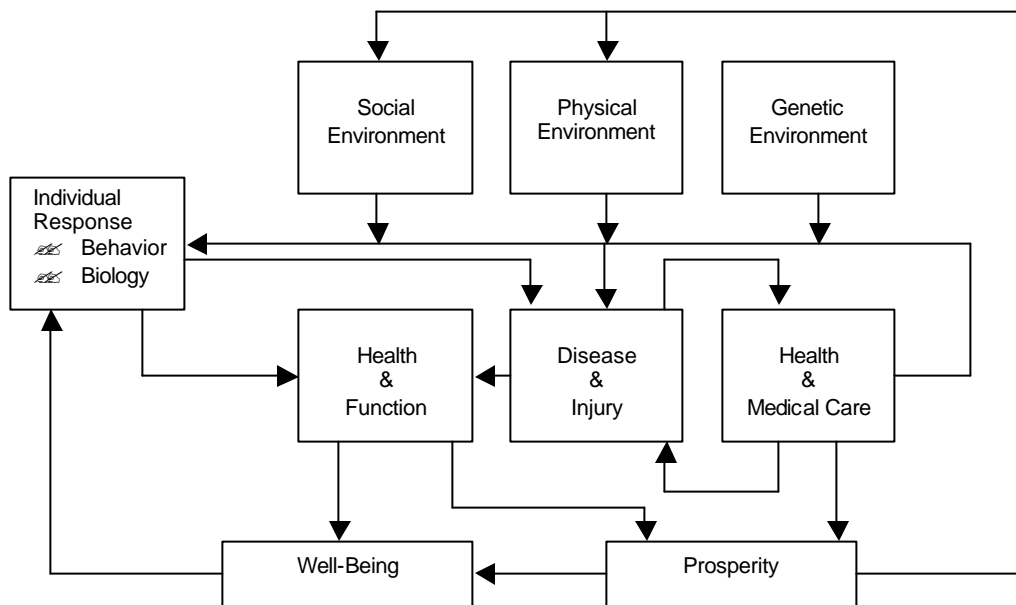
Introduction

In general, fields or factors higher up on the diagram contribute to or influence the occurrence of factors lower down on the diagram. Some useful considerations about how a population's health is produced and represented by the diagram, are:

- The contribution of medical care to a population's health is limited.
- Conditions of the social and physical environment play an important role in producing different health, disease and injury patterns in our population.
- Individual factors, such as risk decisions or response to stress, can moderate the general effects of broader environmental factors on health. The occurrence of individual factors can also be patterned by the social and physical environment.
- Disease and injury, which can be clinically determined and reported in health systems data, are not quite the same thing as health and well-being, which is based on how people experience their own conditions and function with them.
- To change a population's health profile, we have to consider possible changes in their physical and social environment and in the factors influencing behavior, and not just at health care. Indeed, since many health care interventions occur late in sometimes long sequences of events leading to diseases or injuries, in many cases earlier interventions would be more effective or more cost-effective at reducing the ultimate burden of disease.

Note that each box or field in the diagram is itself complex, and not likely to be reducible to a single variable, in its influence on (or representation of) any population's health and well-being. Rather than being seen as a summary of the evidence, the model gives us a useful way to organize the evidence about how health patterns are produced and therefore could be changed in different populations.

We are pleased to present you with this report and hope it contributes to a better understanding of **who we are, how we live**, and **our health**.

We welcome comments and suggestions. Please send them to:

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Planning Office
Population Health and Prevention
San Francisco Dept. of Public Health (415) 255-3470

Introduction ◆ Who We Are

 "Who We Are" refers to the characteristics of the population of San Francisco including age, sex and ethnicity. Across San Francisco we see differences in health and social issues. Women and men face many different health and social concerns; there is a wide disparity among ethnic groups for most health and social issues; and our aging population increasingly affects San Francisco's health needs. In future years, as 2000 census data become available, we will be able to further examine these issues by neighborhood and other characteristics.

POPULATION

San Francisco's population demonstrates several unique features when compared to the rest of California, there is a smaller proportion of children and youth under age twenty-five and a greater proportion of adults and senior citizens. San Francisco also has a substantially larger proportion of Asian and Pacific Islanders, and smaller proportions of Latinos and whites than California as a whole. Among ethnic groups within San Francisco, whites demonstrate the lowest proportion of very young children ages 0-4 as well as the greatest proportion of middle-aged adults between the ages of 45 – 65 years old. Latinos have the largest proportion of young children and the smallest share of senior citizens over 75 years old. These numbers are significant as they highlight the need to address those health issues related to an older population such as diabetes and long-term care.

Population by Age Group, San Francisco, 1999
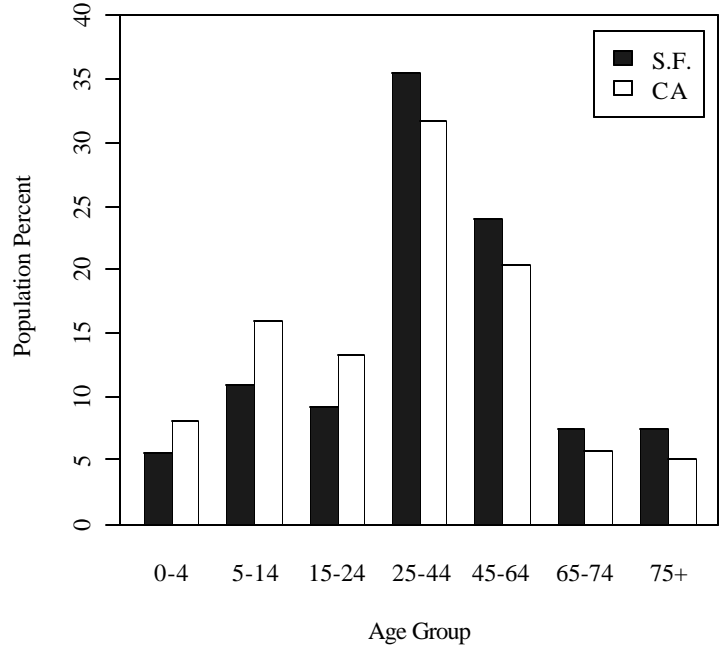
Population by Major Ethnicity Group, San Francisco, 1999
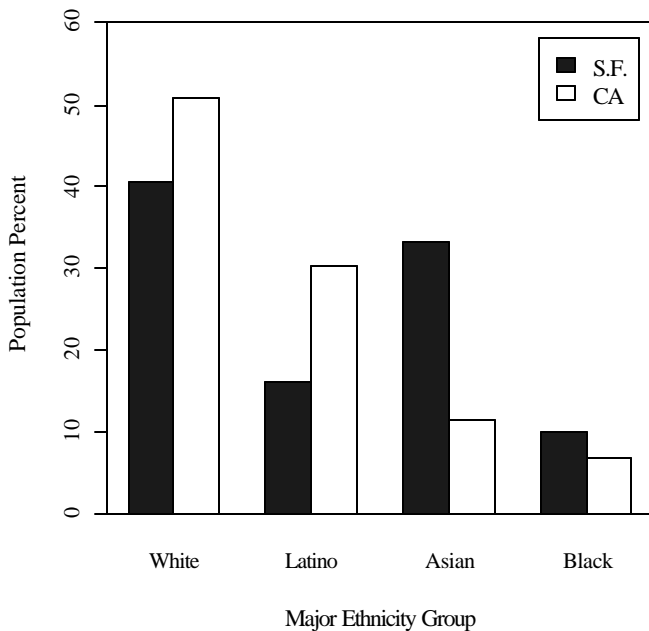
Age Distribution by Major Ethnicity Group, San Francisco, 1999
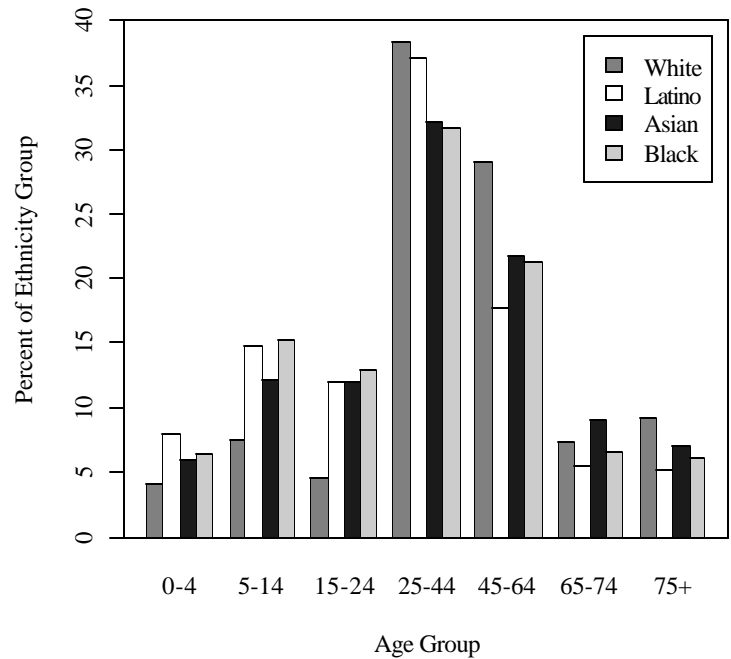
Demographics

Resident Births by Mother's Ethnicity, San Francisco, 1999

Legend:
- ■ All births
- □ Births to mothers <18

(Y-axis: Percent of Births, 0 to 50)

Categories: White, Latino, Chinese, Black, Filipino, Other API, Other

POPULATION--Continued

A third of all births to San Francisco women are to whites, 20% of births are to Latinas, and the third highest number of births are to Chinese women. San Francisco's teen mothers (less than 18 years old) are disproportionately African American and Latina.

Among children in the San Francisco Unified School District, Chinese children represent the largest ethnic group and Chinese and Latino children present the greatest language needs due to limited English proficiency.

Public School Enrollment by Ethnicity and English Proficiency, SFUSD, 2001

Legend:
- □ English
- ■ Limited/no English

(Y-axis: Number Enrolled, 0 to 20000)

Categories: Chinese, Latino, African American, Other non-white, Other white, Filipino, Japanese, Korean, Amer. Indian
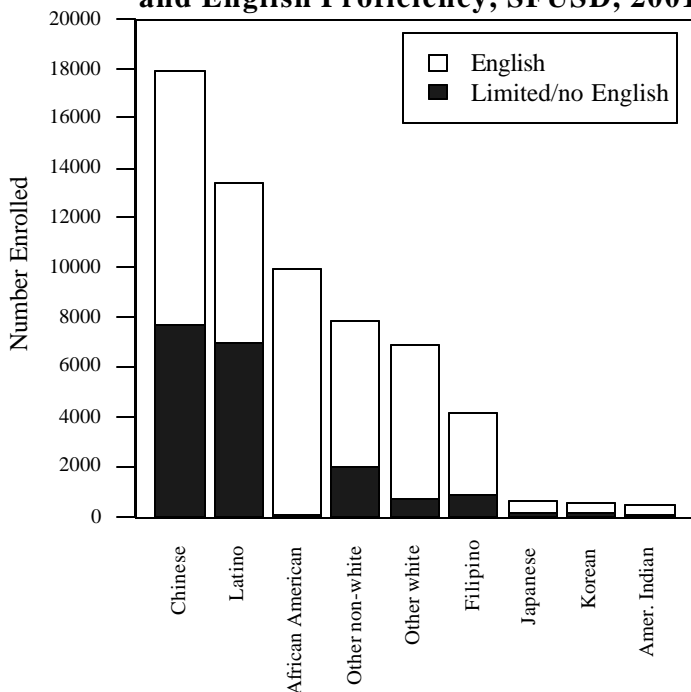
Source: San Francisco Department of Public Health, Records & Statistics
San Francisco Unified School District, Information and Technology

IMMIGRATION

Immigration continues to add to the size and diversity of our population. California, and San Francisco in particular, are points of entry for many immigrants to the U.S. Over the nine years of the 1990s shown in these data, almost 100,000 documented immigrants came to San Francisco. These data do not count undocumented immigrants. An unknown number of these people actually become residents here or move elsewhere, while some immigrants who entered elsewhere may settle here. In 1998-1999, the Department of Finance estimated that San Francisco's population increased by 7,700 people, of whom 83% came from net immigration (6,359 people) and only 17% via natural increase (the difference between births and deaths). For California as whole, these proportions were 45% from immigration and 55% from natural increase.

Legal Immigration to San Francisco, 1990-1998
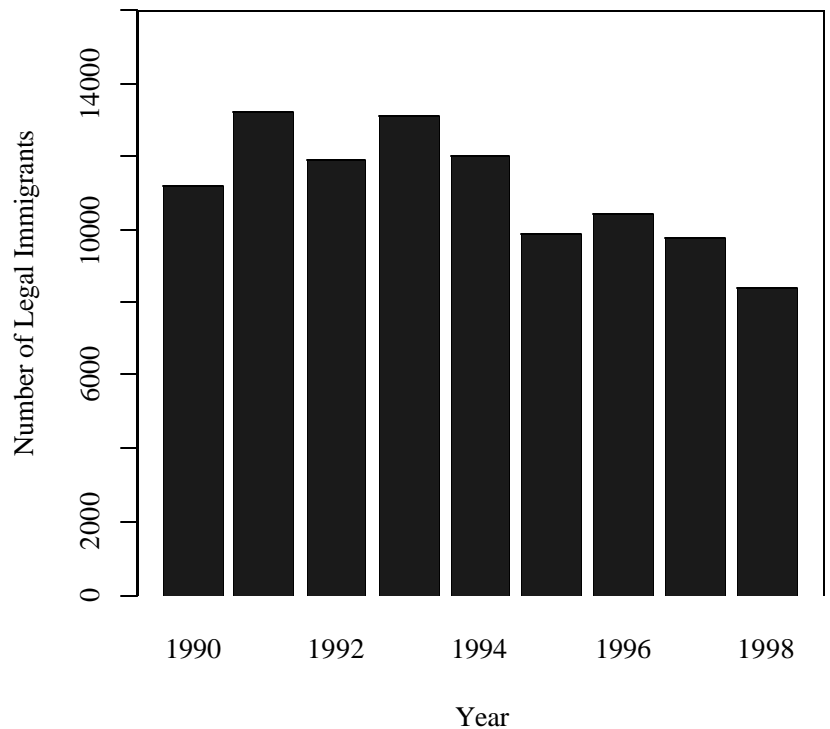
Source: State of California, Department of Finance, Legal Immigration to California by County: Federal Fiscal Year (FFY) 1990-1998. Sacramento, California, November 2000.

Introduction ◆ How We Live

"How We Live" includes conditions of our social and physical environments, and actions we take that increase or decrease our risk of injury or illness. These conditions and actions are important in determining how long we will live and how healthy we will be throughout our lives. The environments that surround us at home, on the streets, in our neighborhoods, in school, and at work, all influence our health. The air we breathe, the conditions that favor tobacco use or exposure to gun violence, and our access to housing all have an impact on our health and well-being. Our activities and habits, and our access to financial, social, health care, and other essential resources all contribute to our health status. Most disease and injury experienced by San Franciscans could be prevented or postponed by changes in how we live.

Economic Conditions

SOCIO-ECONOMIC LIVING CONDITIONS

Socio-economic conditions are closely tied to health outcomes. In general, the better off people are, the better their health is. San Francisco is an expensive city in which to live. There are high levels of homelessness, limited access to affordable housing, and numerous social issues related to poverty and the high cost of living. Availability of childcare, supportive housing, and health programs and services are better here than in many other parts of California. Even so, these resources are not adequate to meet the needs of our diverse communities.

POVERTY

Poverty is a public health problem. A significant proportion of San Francisco's population does not have the income to meet the high cost of living here. An estimated 95,000 San Franciscans live below the federal poverty threshold and, as a result, their health is at risk.

Overall the percentage of San Francisco's population in poverty is lower than in California as a whole, but it is still estimated at 12%, and more than 20% for children. Since Federal poverty levels are set for the nation by a formula which greatly underestimates the real costs needed for subsistence-level living in San Francisco, they likely underestimate the size of the population living in or near poverty here.

Free or reduced cost school lunches are available to low income children attending San Francisco schools.   The large number of children eligible for these programs highlights the number of children living in or near poverty in San Francisco.

Estimated Poverty Prevalence by Age, San Francisco, 1997
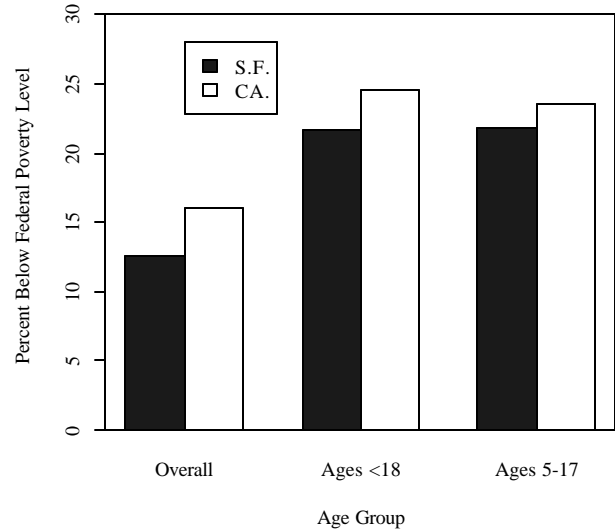
Public School Enrollment by Level and Lunch Program Status, SFUSD, 2001
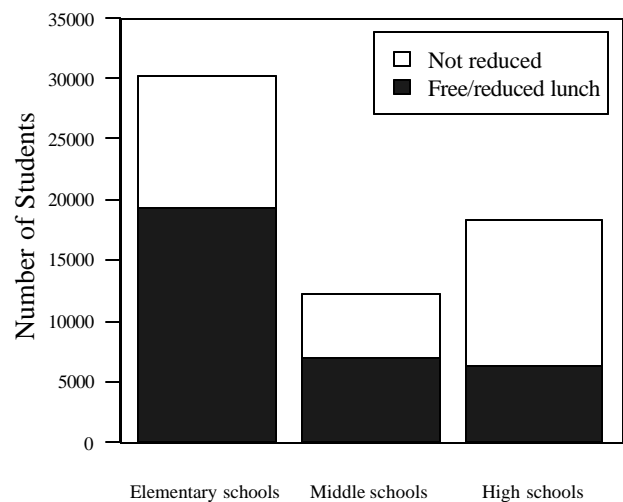
Economic Conditions

PUBLIC ASSISTANCE

These graphs show uses of San Francisco's public assistance programs by demographic characteristics. They reflect not only characteristics of our low income population, but also program eligibility restrictions, time limits, and differential use by population groups influences the picture of participants shown by each of these programs.

The three main benefit programs shown are:
- ?? CalWORKs, serving families with children (the descendent of AFDC, since changed by the 1996 welfare reform to the Federal TANF (Temporary Assistance to Needy Families program);
- ?? CAAP (County Adult Assistance Program) for needy adults, generally single, not supporting children; and
- ?? NAFS (Non-Assistance Food Stamps), part of the Federal food stamp program not covering TANF recipients.

Public Assistance Clients by Age, San Francisco, 2000/2001

Public Assistance Clients by Ethnicity, San Francisco, 2000/2001
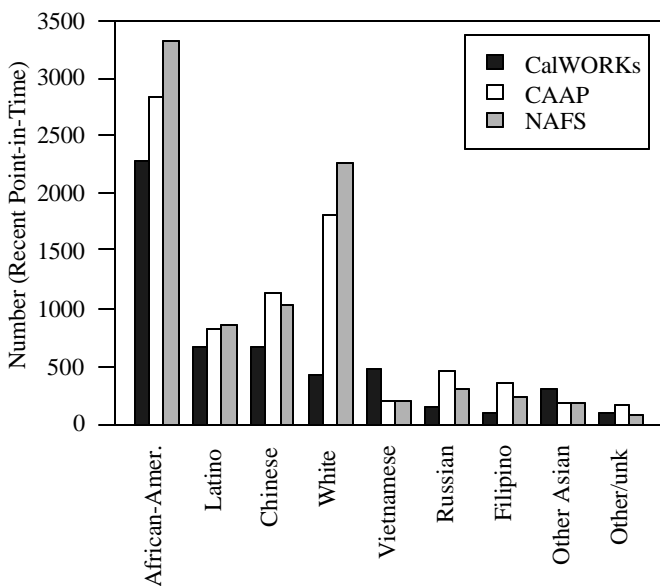
Public Assistance Clients by Primary Language, San Francisco, 2000/2001
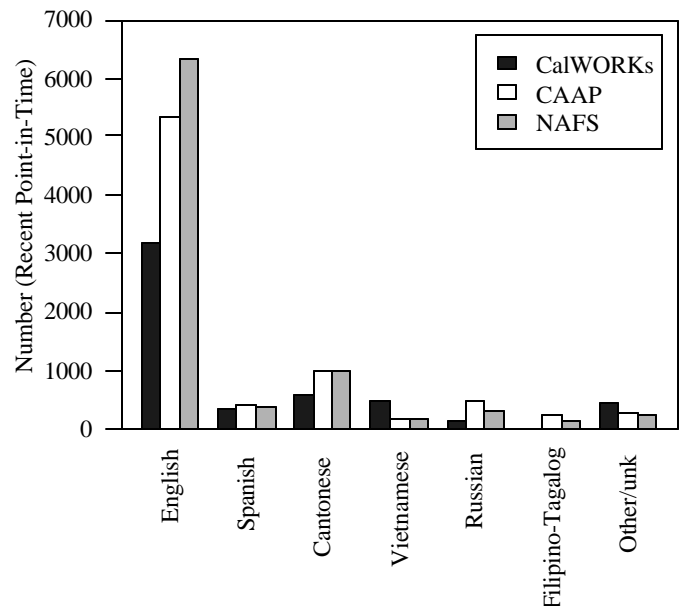
Source: San Francisco Dept. of Human Services, Quarterly Snapshot Reports, http://www.ci.sf.ca.us/dhs/frs.htm

Economic Conditions

INCOME

San Francisco is an expensive place to live. A recent study estimated the minimum cost needed for families with two children to be able to live comfortably in each region and for California overall. San Francisco is part of Region IV, which includes Alameda, Contra Costa, Marin, San Francisco, San Mateo, and Santa Clara counties. The income needed in the Bay Area is about 20% greater than that needed for the whole State, and all the low income standards fall well below the minimum income level needed to live comfortably in the Bay Area.

This figure shows the 1997 distribution of family income in San Francisco; about half the families fall below the minimum comfortable cost of living (COL) for a family with 2 children and 2 working parents. A substantial share of families' incomes also fall below the income provided by one full-time minimum wage or "daily wage" income.

Family Income Distribution, Wage & Minimum Comfortable Cost-of-Living Levels, San Francisco, 1997
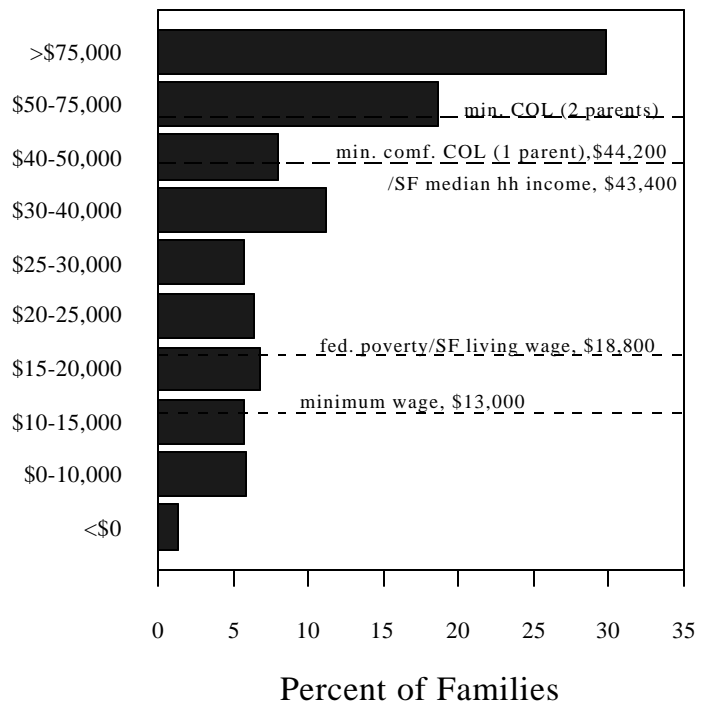
Percent of Families

Economic Conditions

COST OF LIVING

Housing is notoriously expensive in San Francisco. A variety of indicators shown here paint a picture of high housing costs and too little affordable housing available for low and even middle income households.

Housing Cost Indicators, San Francisco Area

Renters	SF*	CA	US	Years	Notes
Pay >30% of income for rent	141,900 (42%)	47%		1998	SF metro; CA metro areas
Pay > 50% of income for rent	73,000 (21%)	24%		1997	CA
Ratio of low-inc. renters to rental units	1.9:1			1998	SF: 75,200 renters, 39,200 units
Renters unable to afford 2-BR apt. at FMR	49%				Metro area
Real market 2-BR apt.	$ 2,043			1999	SF
FMR, 2-BR apt.	$ 1,167			1999	HUD incr. SF FMR to $2043 in '01
Difference	$ (876)				Market cost 175% of FMR
Affordable units at risk of conversion	9,759			2000-2010	SF
Federal housing subsidy, per poor person		$ 171	$ 286		CA 9th lowest of 10 largest states
Increase in rent, 1989-1998	38.4%			1989-1998	SF
Increase in median hh income of renters	9.6%			1989-1998	SF
Increase in median hh income, poor renters	3.4%			1989-1998	SF
Homeownership					
Homeownership	51%	57%	67%	1999	SF metro area
Households that can afford median priced home	27%		55%	1999	SF Bay Area
% of houses affordable to med. hh income	11%			1999	(4th quarter)
Other					
Ratio of new jobs to new housing unts	15.8:1			1994-98	SF
Estimated substandard housing	56,000 (17%)			1997	SF

FMR = Fair Market Rent. Refers to 2-BR, 1-BA apt., unless noted
*SF refers to county unless noted as metro area (SF, Marin, San Mateo) or Bay Area (9 counties)

Source: Ca. Budget Project, *Locked out: California's Affordable Housing Crisis.* May 2000.

HOMELESSNESS

The lack of affordable housing has contributed to the large number of homeless living in San Francisco. Many of the homeless have special needs such as HIV/AIDS services, substance abuse treatment, mental health services, shelter from domestic violence, etc. The table below describes the numbers of homeless and other special needs populations, and their housing needs.

Homeless and Special Needs Populations and their Service Needs, San Francisco 2000

Sub-Population	Individuals			Persons in Families with Children		
	Estimated Need	Current Inventory	Unmet Need Gap	Estimated Need	Current Inventory	Unmet Need Gap
Chronic substance abusers	35,573	5,316	30,257	6,626	404	6,222
Seriously mentally ill	20,925	2,706	18,219	7,830	449	7,381
Dual diagnosed	25,903	3,303	22,600	5,385	316	5,069
Veterans	21,598	2,863	18,735	2,120	116	2,004
Persons with HIV/AIDS	13,646	1,684	11,962	3,700	198	3,502
Victims of domestic violence	6,531	813	5,718	9,555	547	9,008
Youth	20,431	2,657	17,774	NA		
Homeless*	9,375			3,125		
Emergency shelter/inadequate hsg	3,000			781		
Transitional housing services	1,688			625		
Permanent housing services	4,657			1,719		

* estimate for any given night

Economic Conditions

**Child Care Cost as Proportion of
Low Wage Incomes, San Francisco,1999**

Legend:
- ■ Ch.care(1 child,<2)
- □ Rest of income

X-axis: Income Source (Minimum wage, Living wage)
Y-axis: Income
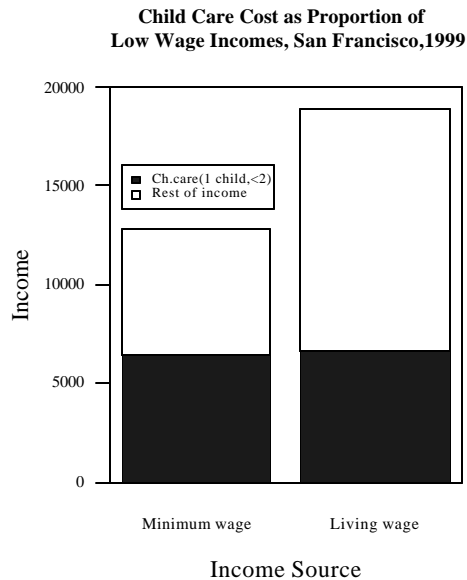
CHILDCARE

Childcare is an important issue for families with young children and working parents. It has important influences on children's development, parents' travel and work schedules, quality of life, and family finances. San Francisco has licensed childcare slots for 32% of its 58,900 children who have working parents (three-fifths of the children under age 14). This proportion is better than California's statewide figure of 21%, but still far below the need here. The cost of licensed childcare also represents a large share of household income for low and many middle income families.

SF Child Care Supply & Demand, San Francisco, 1999

Children living with working parents	Children Number	Percent	Children in care outside of family Number	Percent
Children 0-5	25,899	57%	13,209	51%
Children 6-13	33,062	61%	6,612	20%
Total children, 0-13	58,961	59%	19,821	34%
Licensed child care supply	18,994			
Licensed supply as % of need		32%		

ALCOHOL AND OTHER DRUGS

Drug overdose is a significant public health problem in western cities including San Francisco, Portland, and Seattle. Rates in these cities far exceed those of other cities in the United States.

In 1998, 12,189 hospitalizations at San Francisco General Hospital were due to alcohol, heroin, cocaine, amphetamines, and other drugs. Alcohol and drugs also play a key role in the amount and severity of disease and injury in San Francisco. Drug poisoning, primarily overdoses of heroin and cocaine, and often in combination with alcohol, was the third leading cause of premature death in San Francisco in 1998. In addition, these statistics do not include deaths by causes that are closely associated with alcohol and drug use such as homicides, suicides, motor vehicle accidents and other unintentional injuries.

Alcohol and Drug-Related Deaths, San Francisco, 1994-1998

Legend:
- Drug-related deaths
- (Opiate drug deaths)
- Alcohol-related deaths
- (Alcohol-caused deaths)

X-axis: Year (1994, 1995, 1996, 1997, 1998)
Y-axis: Number of Deaths (0 to 500)
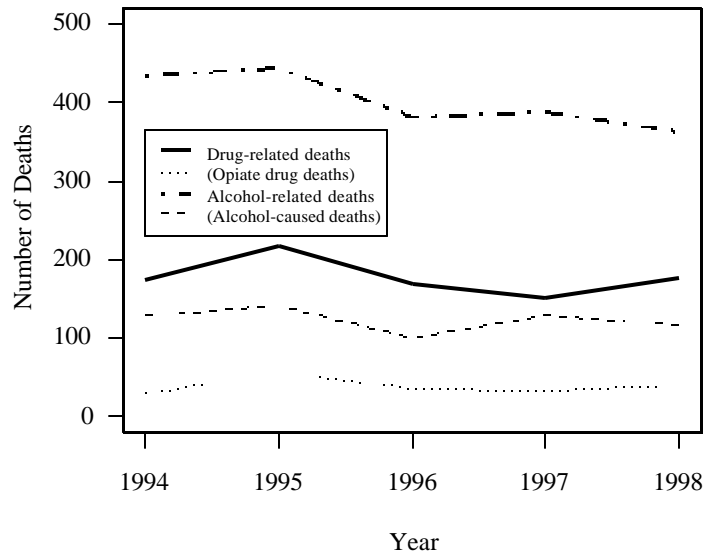
Alcohol and Drug-Related Hospitalizations, (Primary Diagnosis) San Francisco, 1994-1998

Legend:
- Alcohol-related
- alcohol psychoses dx
- alcohol liver damage
- Drug-related
- heroin/opiates

X-axis: Year of Diagnosis (1994, 1995, 1996, 1997, 1998)
Y-axis: Number of Discharges (0 to 1000)

Substance Abuse

ALCOHOL AND OTHER DRUGS—
continued

The data on the previous page show some of the health toll of drugs and alcohol, in deaths and hospitalizations. The second graph shows hospitalizations where the primary cause was alcohol or drugs; the table shows the substantially larger number of hospitalizations with any alcohol or drug diagnosis.

Alcohol and Drug Hospitalizations (Any Diagnosis), San Francisco 1996-1998

	1996	1997	1998	Change
Hosp. Discharges--Alcohol related--Expanded*				
Total	4306	4700	4757	10.5%
Alcohol depend syndrome	2008	2156	2009	0.0%
Non-depend use	637	771	910	42.9%
Alcohol liver damage	857	857	890	3.9%
Alcohol psychoses	628	709	808	28.7%
Hosp. Discharges--Drug related--Expanded*				
Total	6413	6941	7432	15.9%
Heroin/opiates	2579	2820	3074	19.2%
Cocaine	1375	1512	1727	25.6%
Amphetamine	549	667	594	8.2%
Cannabis	194	285	315	62.4%
Barbiturates	70	60	93	32.9%

* Expanded to include not only primary diagnosis, but any drug- or alcohol-related diagnosis.

These have only been analyzed since 1996.

Source: Ca. Dept. of Alcohol & Drug Programs (CDADP), Indicators of Alcohol and Drug Abuse Annual Review
http://www.adp.cahwnet.gov/pdf/coverpage.pdf

ALCOHOL AND OTHER DRUGS--continued

Indicators below show the toll of arrest for drug and alcohol charges and driver's license suspensions. They do not include non-drug crimes such as robberies that can be influenced by the use of or need for drugs and/or alcohol.

Alcohol and Drug Direct Criminal Justice Indicators, San Francisco 1996-1998

Indicator	1994	1995	1996	1997	1998	1997-98 Change
Criminal justice						
Adult drug-related arrests	9,115	8,401	8,443	9,280	10,941	17.9%
Felony	7,672	6,930	8,206	8,192	8,920	8.9%
Misdemeanor	1,443	1,471	237	1,088	2,021	85.8%
Adult alcohol-related arrests	3,802	3,221	3,624	3,794	4,969	31.0%
Felony	139	112	125	124	134	8.1%
Misdemeanor	3,663	3,109	3,499	3,670	4,835	31.7%
Juvenile drug-related arrests	651	555	688	653	627	-4.0%
Juvenile alcohol-related arrests	57	37	39	45	54	20.0%
Drug commitments	588	461	322	184	188	2.2%
Ca. Rehab. Ctr.	34	18	8	4	5	25.0%
Dept. of Corrections	539	435	304	178	180	1.1%
CYA	15	8	10	2	3	50.0%
DMV						
Driver lic. suspensions/revocations	745	726	588	423	712	68.3%

Smoking

SMOKING

From 1990 to 1995, about 10% of deaths in San Francisco were attributable to tobacco. Since 1990, smoking rates in San Francisco have decreased in the overall population and in all ethnic groups except whites. In 1998, one-sixth of randomly surveyed San Francisco tobacco vendors illegally sold tobacco to people under age 18, a decrease from previous years, but still indicating that tobacco is too readily available to underage youth.

**Smoking by Major Ethnicity Group,
San Francisco,1994-1996**
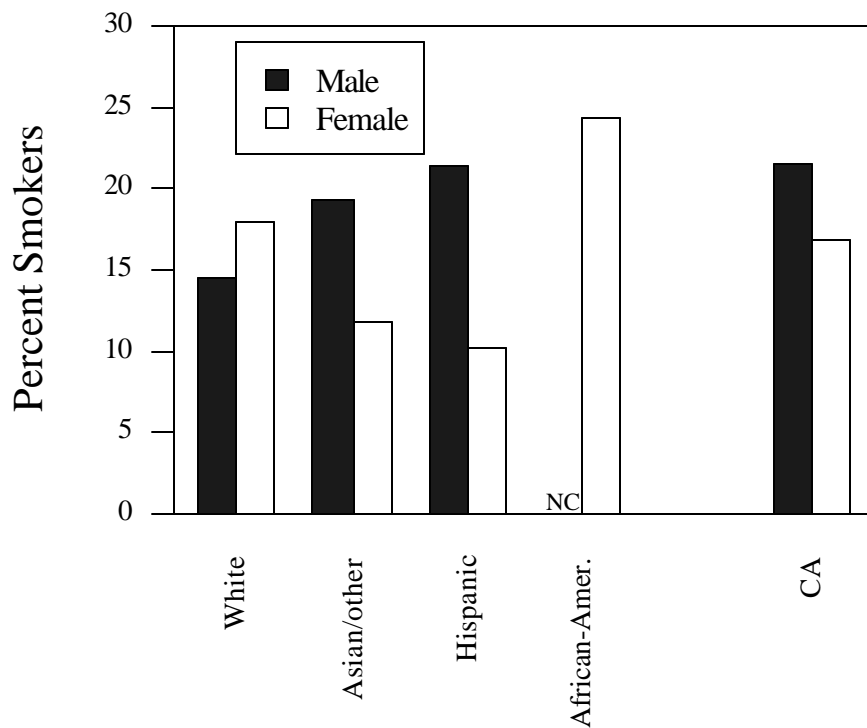
Source: Tobacco Control Program, San Francisco Department of Public Health

PHYSICAL INACTIVITY

It has been estimated that physical inactivity in the U.S. is implicated in perhaps a quarter of a million deaths a year, including about 25% of all chronic disease deaths. It affects cardiovascular risk through its influence on blood pressure, cholesterol, weight, and other mechanisms. There are large differences between ethnic groups in degree of inactivity in California, with Latino/Hispanic men (70%) and women (66%) most likely to be inactive. Between 50% and 54% of African-American men and women are also likely to be sedentary. Asian/other women (63%) are more likely than men (44%) to be inactive. There are no age differences, but there are differences by education. College graduates have significantly lower inactivity prevalence (44%) than those with no more than a high school education (63%).

In the Bay Area, white women have lower percents inactive than Latino/Hispanic (64%) or Asian/other women, but not different than African-American women, who are much less inactive than their statewide counterparts. White men are also significantly less inactive than Latino/Hispanic men. There were insufficient data sampled to estimate the prevalence for Bay Area African-American men.

Physical Inactivity by Major Ethnicity Group, San Francisco,1994-1996

Overweight

OVERWEIGHT

Overweight, measured by body mass index (a ratio between height and weight), is an important risk factor for heart disease, both in itself and also through its contribution to high cholesterol, high blood pressure and diabetes. Frequency of being overweight has been increasing among Californians, rising by over 50% from 1984 to 1996 -- by 41% for women and 60% for men. By 1996, 27% of adults were estimated to be overweight. Statewide, there were no differences by sex within any ethnicity, but Latino/Hispanic women (42%) and men (34%) and African-American women (40%) and men (37%) had significantly higher overweight prevalences than white women (24%) or men (25%). Proportion overweight rises across age groups through ages 45-54, and then declines somewhat among older ages. The proportion overweight among college graduates (20%) is more than a third less than it is among those with no education beyond high school (31%).

In the Bay Area, percentages of those overweight did not differ by sex within ethnic groups. Latino/Hispanic men had significantly higher prevalence than white men, who were themselves much higher than Asian/other men. There were insufficient data for a reliable estimate for African-American men. Among women, African-Americans and Latina/Hispanics were higher than whites, who were higher than Asian/other women.

**Overweight by Major Ethnicity Group,
San Francisco,1994-1996**

UNINTENTIONAL INJURIES

Injuries account for a significant proportion of deaths, hospitalizations, and emergency responses in San Francisco. The biggest cause of non-vehicular, unintentional death is due to drug overdose. The second leading cause is falling.

There were over 7,000 motor vehicle related injuries in San Francisco last year. In San Francisco, more than half of all motor vehicle deaths are to pedestrians.

Non-Vehicular Unintentional Injury Deaths in San Francisco,1989-90 to 1999-2000
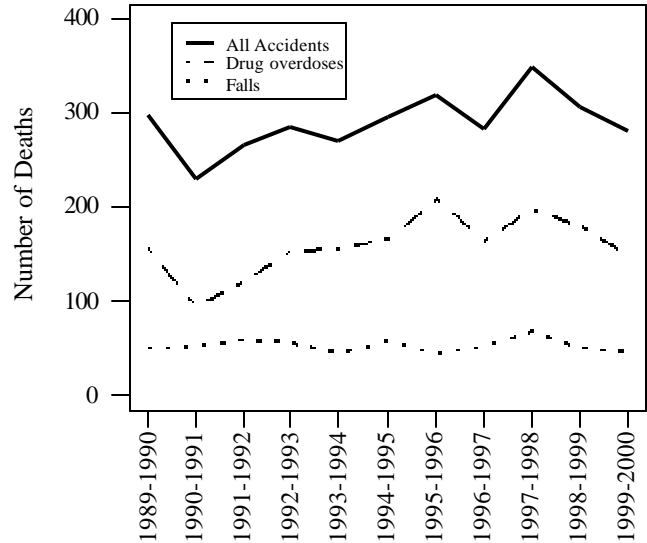
Motor Vehicle Accident Injuries in San Francisco, 1993-1999
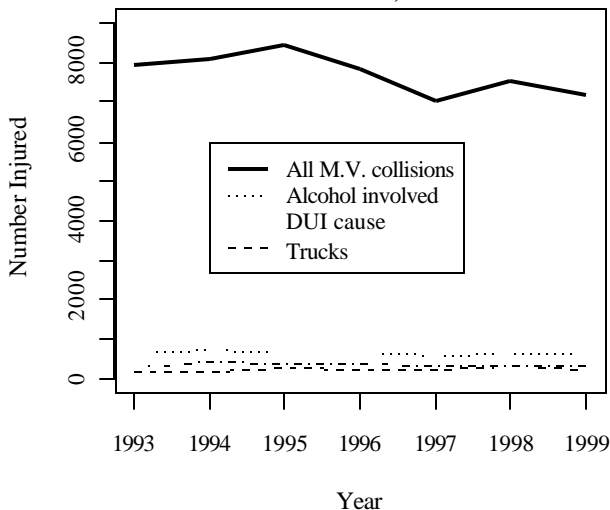
Vehicular Deaths in San Francisco,1989-90 to 1999-2000
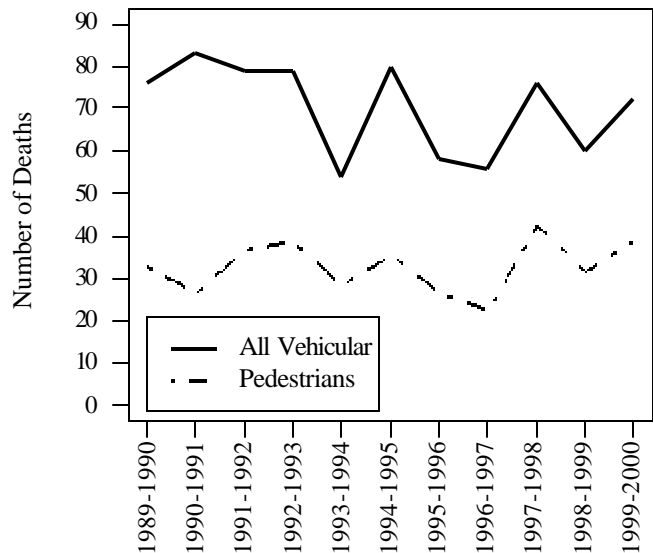
Source: SF Office of Medical Examiner. Annual Report (various years) (deaths)
California Highway Patrol, SWITRS. http://www.chp.ca.gov/html/switrsl999.html (Injuries)

Injuries

VIOLENCE/INTENTIONAL INJURIES

Deaths from homicide have been declining in San Francisco since the early nineties. This is attributable to a decrease in the number of firearm homicides. In 1999 there were 180 firearm incidents (fatal and non-fatal) in San Francisco. These incidents were concentrated in the Western Addition, along Mission Street, and in Bayview Hunter's Point. Substantially fewer gun related incidents took place in the Western side of the city.

CRIMES

Crime rates in San Francisco have gone down in recent years in keeping with state and national trends. In 1998 there were 1188 arrests for spousal abuse in San Francisco.

Homicide Deaths in San Francisco, 1987-88 to 1999-2000
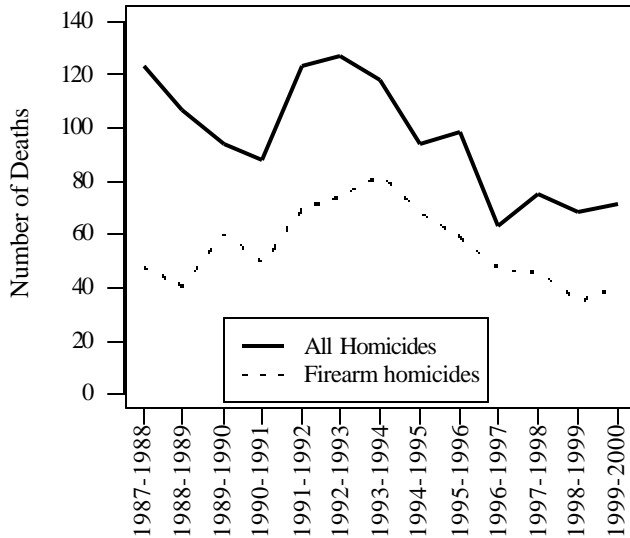
Crimes Reported in San Francisco, 1997-1999

	1997	1998	1999	Percent change 1997-99	1998-99
Ca. Crime index total	23,314	20,790	18,058	-22.5%	-13.1%
Violence	8,549	7,337	6,555	-23.3%	-10.7%
Homicide	59	58	64	8.5%	10.3%
Forcible rape	233	244	103	-55.8%	-57.8%
Robbery	4,606	3,927	3,475	-24.6%	-11.5%
Aggravated assault	3,651	3,108	2,823	-22.7%	-9.2%
Property Crimes	8,549	13,453	11,503	34.6%	-14.5%
Burglary	7,153	6,706	5,526	-22.7%	-17.6%
Motor vehicle theft	7,649	6,747	5,977	-21.9%	-11.4%
Larceny theft	29,943	25,349	25,264	-15.6%	-0.3%
Arson	432	363	275	-36.3%	-24.2%
Total/FBI Crime Index	53,669	46,492	43,597	-18.8%	-6.2%

The Ca. Crime Index includes the categories listed under violence and property crimes.
The FBI Crime Index includes those, plus larceny theft and arson.

1999 Fatal and Nonfatal Firearm Incidents
San Francisco County
N=180

94130

94109
94147
94133
94129
94123
94111
94160 94177
94135
94108
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94170

Environmental Health
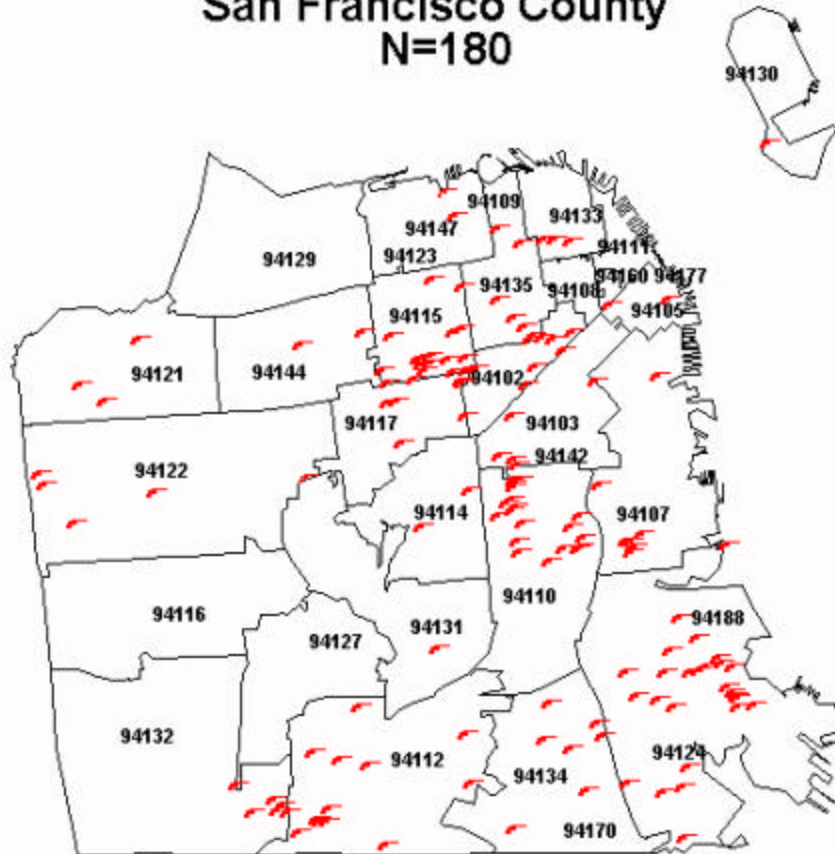
AIR QUALITY

The Federal Clean Air Act directs the Environmental Protection Agency (EPA) to develop and promulgate health based standards for certain "criteria" ambient air pollutants including ozone, respirable particulate matter (PM_{10}), sulfur dioxide, nitrogen dioxide, carbon monoxide, and lead. Ozone and carbon monoxide levels did not exceeded the standard in 1999. However, for particulate matter, we had six days over the standard, which is as much as in the previous 4 years combined. Particulate matter can make asthma and other respiratory problems worse. In the Bay Area, major sources of PM_{10} include industrial emissions, motor vehicles, road dust, construction, demolition, and residential wood smoke.

Summary of San Francisco Air Quality Monitoring Data, 1995-1999

Pollutant	Standard State	National	Pollutant Concentration by Year 1995	1996	1997	1998	1999
Ozone							
Highest 1-hour average, ppm	0.09	0.12	0.09	0.07	0.07	0.05	0.08
Days over state standard			0	0	0	0	0
Days over national standard			0	0	0	0	0
Highest 8-hour average, ppm	NA	0.08	0.07	0.05	0.06	0.05	0.06
Days over standard			0	0	0	0	0
Carbon monoxide							
Highest 8-hour average, ppm	9	9					
Arkansas St. station			4.4	3.9	3.5	4	3.7
Ellis St. station			5.5	5.6	5.8	3.7	4.6
Days over standard			0	0	0	0	0
Respirable particulate matter (PM-10)							
Highest 24-hour average, ug/m^3	50	150	50	71	81	52	78
Number of samples			61	61	61	61	61
Days over state standard			0	2	3	1	6
Days over national standard			0	0	0	0	0
Annual average, ug/m^3	30	50	22	21	23	20	23

Source: Ca. Air Resources Board. www.arb.ca.gov/adam

Access to Health Care

UNINSURED

Access to health care services is a significant issue in San Francisco, as it is throughout California and the rest of the United States. Lack of access to preventive and ongoing health care services leads to higher rates of preventable disease and injuries and poorer health outcomes from illness and injury. A common indicator of access to health care services is the availability of health insurance.

It is estimated that about a quarter of our population is uninsured. Compared to other large metropolitan areas, ours has a higher proportion of uninsured, and a higher proportion of low-income people who are uninsured. The majority of residents without health insurance are employed (full or part-time) or are members of families with working adults.

Among low-income people, the uninsured were less likely to have a usual source of health care or to have seen a doctor in the past year. They were also more likely to have delayed or not gotten health care they thought they needed. The San Francisco metropolitan area was worse in each of these categories than the average for other metropolitan areas.

Health Insurance and Utilization by Income,* San Francisco MSA, 1997
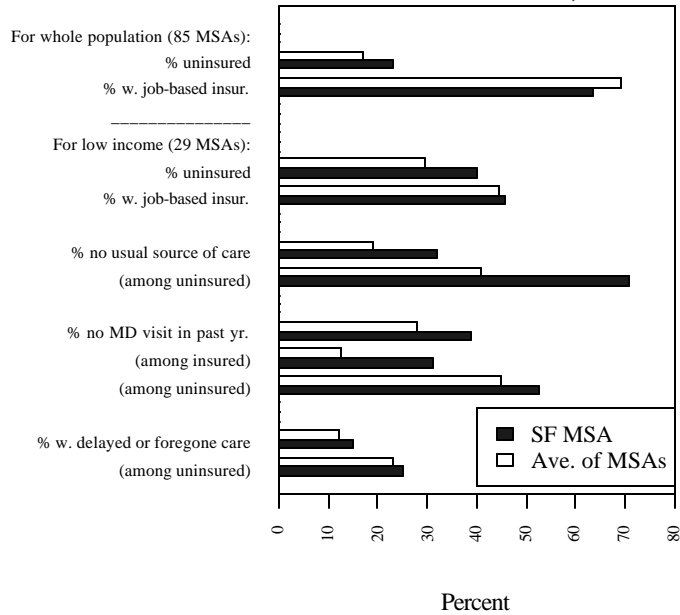
Access to Health Care

Late Prenatal Care by Mother's Ethnicity and Primary Payor Source, San Francisco, 1999

Percent Late Prenatal Care
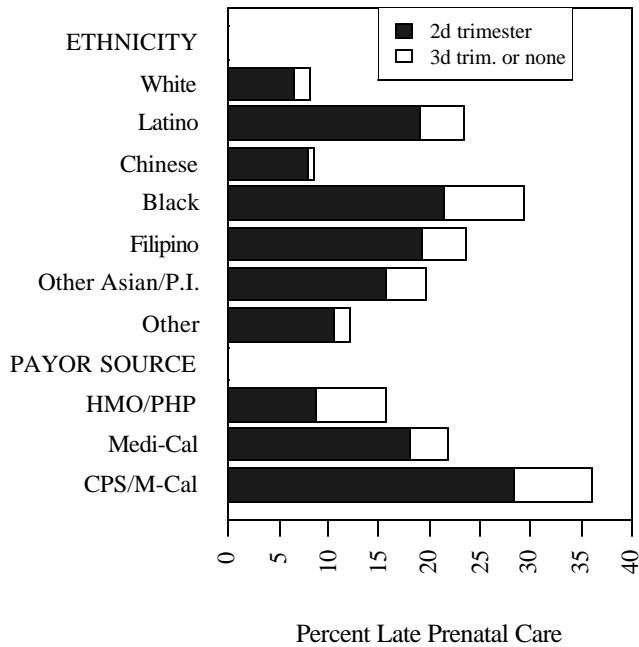
PRENATAL CARE

Pregnant women should begin prenatal care in their first trimester. Later prenatal care is an indicator of lack of access to health care and is generally associated with increased risk for poor perinatal and infant health outcomes. These data show that in San Francisco, African American women had the highest percentage of late prenatal care.

Immunization Coverage, San Francisco, 1996 and 1999

Population Group
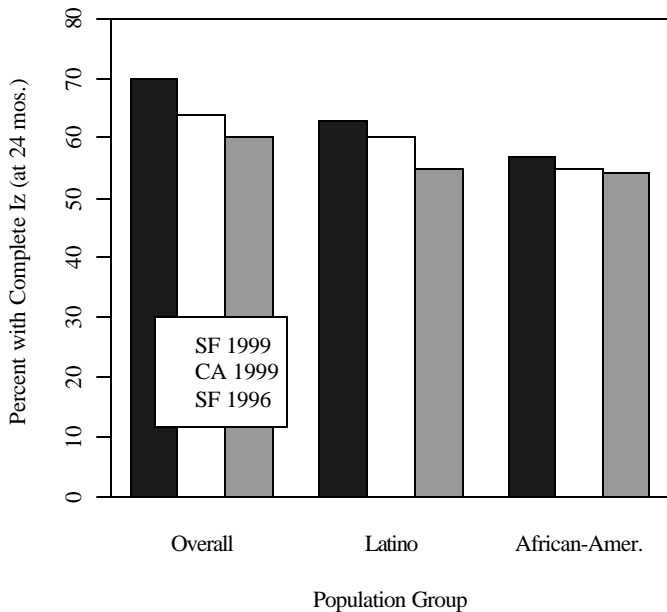
IMMUNIZATIONS

Being up-to-date on child immunizations at 24 months of age is another general indicator of children's access to health care. The national objective for year 2010 is 90%. While we are still far below that goal, in 1999 San Francisco was doing better than the state average (70% vs. 64%) and much better than 3 years earlier (70% vs. 60%). Latino children still fall far behind white and Asian children in San Francisco, but are doing better than Latinos in the state as a whole, and improved 8% from 1996 (63% vs. 65%). In 1999, African American children were doing slightly better than the 1999 state and 1996 San Francisco rates, but had only improved 3% from 1996, compared to 8-9% improvement for other race/ethnic groups.

Source: San Francisco Department of Public Health, Records & Statistics

MEDICARE & MEDI-CAL

This table provides some descriptive information about San Francisco's use of the federal-state funded programs, including Medicare (for seniors and disabled) and Medi-Cal (Medicaid, for qualifying, low-income people). San Francisco has a higher proportion of its population on the state–federal disability program SSI/SSP than California as a whole. Almost half of all Medi-Cal enrollees used medical care, but less than 7% used any dental services

Medicare and Medi-Cal Enrollment, San Francisco, 1998

Indicator	SF Number	SF Measure	CA Measure	Measure info
Cal Works		2.1%	4.9%	% of county pop.
SSI/SSP		5.8%	3.1%	% of county pop.
Unemployed		2.3%	5.0%	% of labor force (Feb., 2000)
Medicare				
Enrollees	115,952	14.7%	11.3%	% of county pop.
enrollees 65+	102,417	13.0%	10.0%	"
disability beneficiaries	13,535	1.7%	1.3%	"
Medi-Cal				
Eligibles	106,859	13.5%	14.8%	% county pop.; ave./mo.
also eligible for Medicare		34.2%	15.6%	% Medi-Cal eligibles
Medi-Cal eligibles by ethnicity				
Not reported		25.7%	10.8%	% of eligibles
White		22.3%	29.2%	"
Black		21.4%	14.2%	"
Asian/Pac. I.		18.6%	7.7%	"
Hispanic		11.8%	37.7%	"
Medi-Cal users	51,691	6.5%	5.6%	% county pop.; ave./mo.
		72.3%	65.9%	% of eligibles; ave./mo.
Dental service users	6,599			average monthly users
Medi-alC payments		$ 577.54	$ 447.89	amount per user; ave./mo.
Prepaid Health Plan enrolless	35,324			ave. monthly

Introduction ◆ Our Health

Our health status is largely a product of who we are and how we live. Our data show that many people in San Francisco face a variety of diseases and injuries. While we do not have current data on all disabling conditions or on the quality of life experienced by different segments of the population, we do present data on the most significant contributors to the burden of disease and injury in San Francisco. These data provide us with a measure of many of the pressing health issues that we must tackle as individuals, communities, and as a city.

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.

Leading Causes of DALYs, San Francisco, 1998

Disability Adjusted Life Years
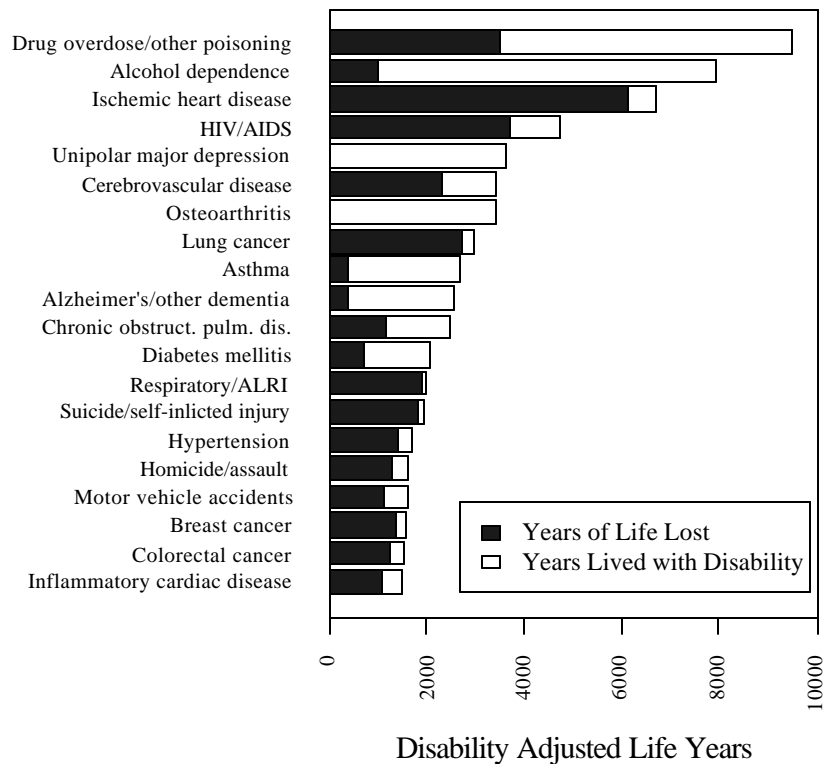
Source: San Francisco Dept. of Public Health, Community Health Epidemiology

Burden of Disease

**Leading Causes of Years of Life Lost
among Whites, San Francisco, 1998**

- Ischemic heart disease
- HIV infection/AIDS
- Drug poisoning UI
- Lung cancer
- Lower resp. (Pneumonia)
- Suicide
- Cerebrovascular (Stroke)
- Chronic obstr. pulm. disease
- Alcohol dependency
- Chronic liver & cirrhosis

■ Male
□ Female

0 2000 4000 6000 8000 10000 12000
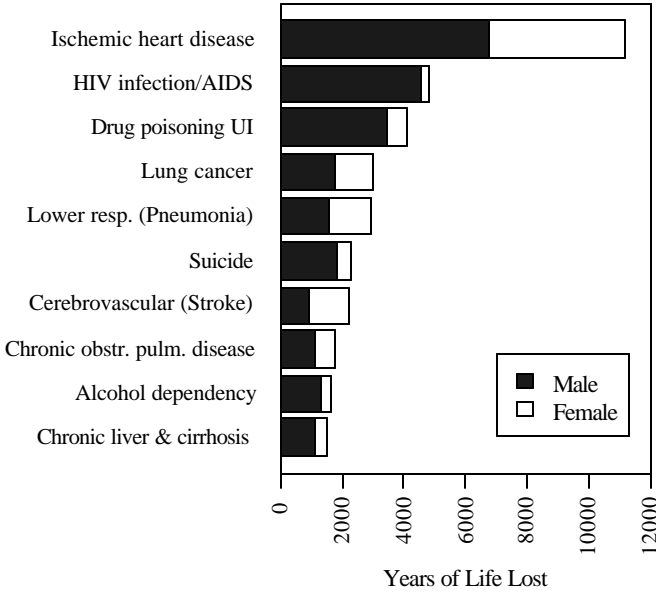
Years of Life Lost

PREMATURE DEATH

SFDPH analyzes the extent to which specific causes of death contribute to premature mortality by measuring expected years of life lost (YLLs). This measure, which gives greater weight to deaths the younger the persons is in which they occur, compared to a standard life expectancy. Many of these years of life lost could be prevented.

**Leading Causes of Years of Life Lost
among Hispanics, San Francisco, 1998**

- Ischemic heart disease
- Drug poisoning UI
- HIV infection/AIDS
- Homicide
- Cerebrovascular (Stroke)
- Lower resp. (Pneumonia)
- Motor Vehicle-Traffic
- Lung cancer
- Alcohol dependence
- Inflam/infect/cardiomyop

■ Male
□ Female

0 250 500 750 1000 1250 1500

Years of Life Lost

Source: San Francisco Dept. of Public Health, Community Health Epidemiology

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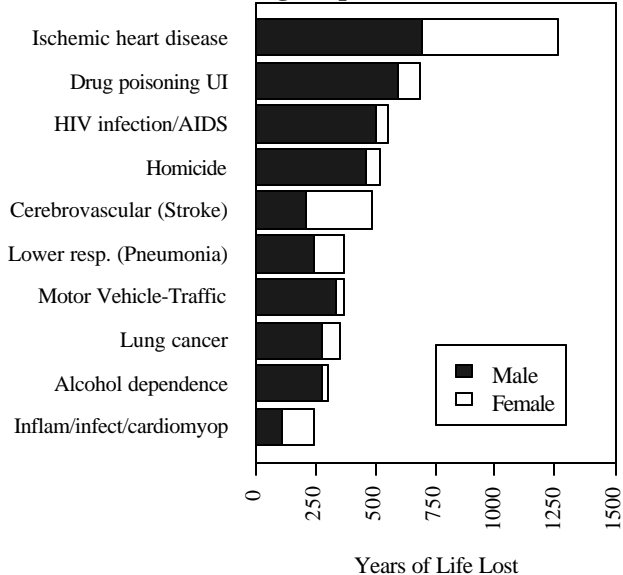
PREMATURE DEATH--continued

Ischemic heart disease is the leading cause of premature mortality for all 4 ethnic groups. HIV/AIDS and drug poisoning are 2nd and 3rd among whites, Latinos, and African Americans. Note that these numbers cannot be directly compared among groups (nor should they be compared to DALYs. See technical notes)

Leading Causes of Years of Life Lost among Asian/Pacific Islanders, San Francisco, 1998
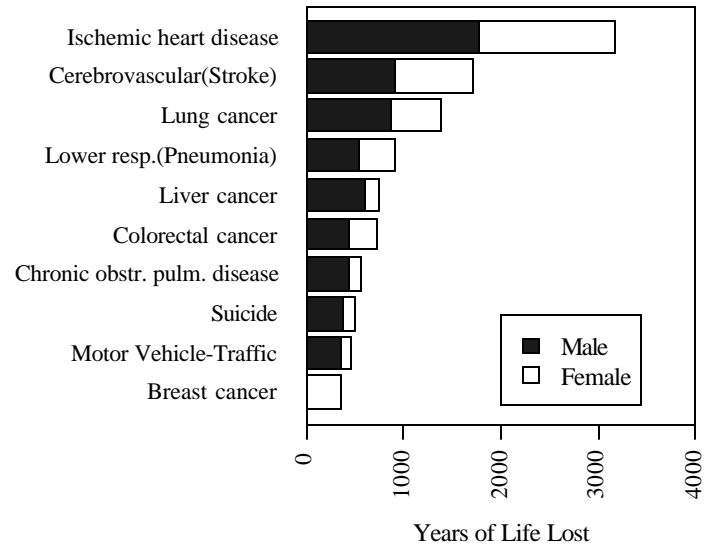
Leading Causes of Years of Life Lost among African Americans, San Francisco, 1998
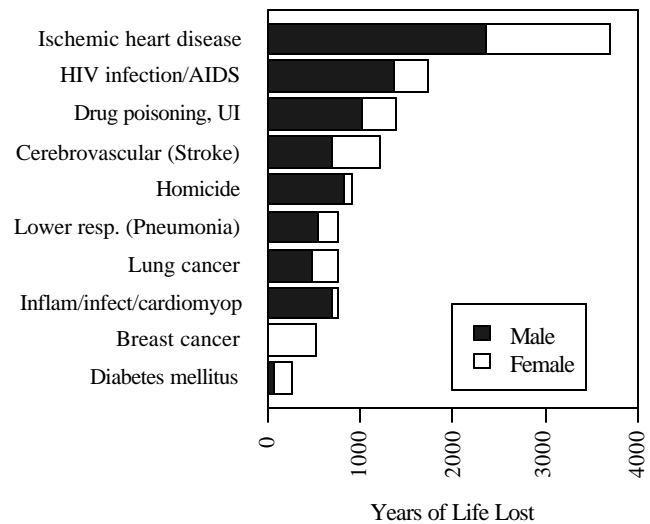
Burden of Disease

MORTALITY

Major causes of death are standard components of health indicator data. Healthy People 2010 objectives are set for many causes of mortality, which allow for national, state, and local comparisons. This table shows how San Francisco compares to California and the national objectives in the most recent data available.

Generally, the mortality of San Franciscans compares favorably with Californians as a whole on most measures, except for drug related deaths and AIDS. Drug poisoning is the main component of our elevated unintentional injury rate.

Major Causes of Death, San Francisco, 1999

County Rank	Cause of Death	Number of deaths	Adjusted death rate	95% conf. limits	Ca. Adjusted death rate	National objective
9	All Causes (1997-1999 average)	6,694.3	719.9	688.8 , 751.1	791.5	N/E
25	Coronary heart disease	1,592	164.1	156.0 , 172.2	193.0	166.0
28	Cerebrovascular disease	603	61.1	56.2 , 66.0	63.3	48.0
14	All Cancers	1,535	166.6	158.2 , 175.0	179.5	159.9
8	Lung cancer	374	41.1	36.9 , 45.2	46.9	44.9
6	Female breast cancer	88	17.2	13.5 , 20.9	24.6	22.3
(not ranked)	AIDS/HIV disease	197	21.7		4.6	N/E
13	Diabetes	143	15.3	12.8 , 17.8	20.5	45.0
31	Unintentional Injuries	288	33.5	29.5 , 37.4	27.5	17.5
12	Motor vehicle accidents	51	6.4	4.6 , 8.2	9.5	9.2
22	Suicide	83	9.6	7.5 , 11.7	9.4	5.0
41	Homicide	51	6.5	4.7 , 8.4	6.0	3.0
56	Drug-related deaths**	178	20.4	17.3 , 23.4	9.1	1.0
16	Firearm injuries**	50	6.4	4.6 , 8.2	9.0	4.1

* Due to a change in coding of causes of death in 1999, all data except "All causes" are for 1999 only.
** These categories include deaths from other causes, such as homicide, suicide and unintentional injuries.
Adjusted rates are age-adjusted to US 2000 standard population.
NE=no national standard established
Note that changes in coding and adjustment standard make it inappropriate to compare these rates to those from prior years.

Source: California Dept. of Health Services, *County Health Profiles, 2001;* personal communication (AIDS/HIV mortality)

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MORALITY--continued

San Francisco has a much higher death rate than California as a whole for non-elderly adults ages 25 – 54. These are the age groups that are disproportionately affected by drug overdose and AIDS mortality.

Overall mortality rates by sex and ethnicity show that, within each ethnic group, male mortality is much greater than of females. Among the major ethic groups, African Americans' mortality is by far the highest, for both sexes, while Asian/other and Latino/Hispanic mortality is the lowest.

Age- specific Death Rates, San Francisco and California, 1996-1998

Deaths	SF rate	Ca rate		SF:Ca Ratio
Summary death rates				
Crude deaths	8.4	6.7		1.3
Age-adjusted death rate	439.4	425.7		1.0
Age-specific death rates				
1-4	18.2	29.1	*	0.6
5-14	9.1	16.7	*	0.5
15-24	84.1	78.5		1.1
25-34	147.0	98.7		1.5
35-44	315.0	182.6		1.7
45-54	547.9	382.9		1.4
55-64	923.6	906.1		1.0
65-74	1999.6	2208.0		0.9
75-84	4515.1	5300.3		0.9
85+	11955.2	14349.0		0.8

* Rate not considered reliable due to too few deaths

Crude and age-specific rates are deaths per 100,000 persons in age category

Crude rate is for all ages.

Age-adjusted to 1940 US standard population.

Age-Adjusted Death Rates by Sex and Major Ethnicity Group, San Francisco,1998
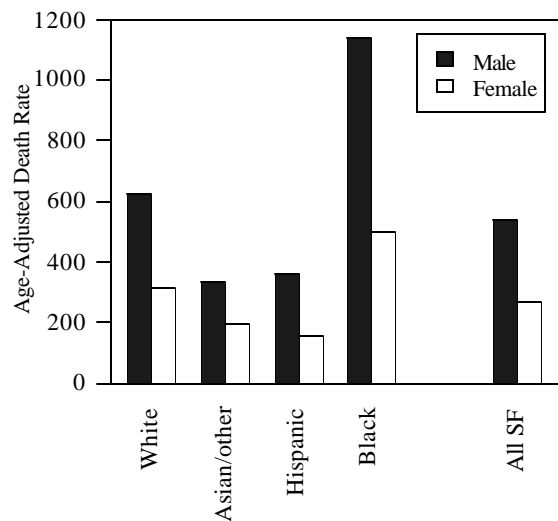
Burden of Disease

DISABILITY

We have no systematic data showing the number of San Franciscans whose ability to function in daily living are hampered to various degrees by disabilities. Among those who are more severely disabled, such that their ability to work is seriously compromised, many will receive Supplemental Security Income (SSI). This federal program is administered by the Social Security Administration; recipients' benefits are supplemented by the state SSP program.

December 1999 data show that 46,371 San Franciscans received benefits from the program. Of these, 44% were classified as aged and 56% as blind or disabled. This differs markedly from the statewide program proportions of 31% aged and 69% blind or disabled. Accordingly, a much higher proportion of SSI recipients were over 65 in San Francisco (57%) than in California (44%), and a lower proportion were under age 18 (1.9%, compared to 7.5% statewide). Almost a third of San Franciscans on SSI also received social security retirement, survivor or disability benefits.

Disabilities

Persons receiving federal SSI payments	Category		Age				SSI w.	Amount of payments
	Total	**Aged**	**Blind & disabled**	**<18**	**18-64**	**65+**	**OASDI**	**($1,000s)**
California								
1998	1,042,002	324,774	717,228	78,861	505,786	457,355	393,012	$ 496,115
1999	1,065,323	330,225	735,098	79,911	518,376	467,036	400,389	$ 527,559
1998-1999 change	2.2%	1.7%	2.5%	1.3%	2.5%	2.1%	1.9%	6.3%
Part of total	1.000	0.310	0.690	0.075	0.487	0.438	0.376	--
San Francisco								
1998	46,036	20,096	25,940	975	19,112	25,949	14,727	$ 23,452
1999	46,371	20,451	25,920	892	19,036	26,449	14,861	$ 24,685
1998-1999 change	0.7%	1.8%	-0.1%	-8.5%	-0.4%	1.9%	0.9%	5.3%
Part of total	1.000	0.441	0.559	0.019	0.411	0.570	0.320	--
SF as % of CA (1999)	4.4%	6.2%	3.5%	1.1%	3.7%	5.7%	3.7%	4.7%

Source: SSA, *SSI Recipients by State and County, December 1998* and *December 1999*, Table 3.

HIV/AIDS

The number of new AIDS cases peaked in 1992, corresponding to the peak in the incidence of HIV infection in the early 1980s. The incidence of AIDS has declined since 1992.

In recent years, the decline in AIDS incidence has been attributed in part to the use of highly active antiretroviral therapies (HAART), which became widely available in 1996. HAART has both prolonged the time from HIV infection to the development of AIDS and has increased the survival after AIDS. The impact of HAART on reducing HIV related morbidity and mortality may, paradoxically be contributing to a recent increase in sexual risk behaviors among men who have sex with men, the group most severely affected by HIV infection in San Francisco. The change in level of risk behaviors has led to an increase in the estimated incidence of HIV infection among men who have sex with men.

The result of the increase in HIV incidence, coupled with the decreases in AIDS incidence and deaths, has been an ever-increasing number of persons living with HIV/AIDS who are in need of HIV related prevention, health care, and social services.

AIDS Cases by Transmission Category, Sex, Ethnicity, and Year of Diagnosis, San Francisco, 1990-1999

	Number of Cases				1990-2000	
	1990	1992	1996	2000*	Diff.	% Change
Transmission Category						
MSM	1846	2009	813	269	-1577	-85%
IDU	123	212	156	81	-42	-34%
MSM IDU	305	346	155	55	-250	-82%
Lesbian IDU	4	7	1	0	-4	-100%
Hemophiliac	2	7	0	0	-2	-100%
Heterosexuals	26	39	34	24	-2	-8%
Transfusion	13	11	5	3	-10	-77%
Other	11	19	18	9	-2	-18%
Pediatric (0-12)	4	4	3	1	-3	-75%
Sex						
Male	2267	2544	1094	395	-1872	-83%
Female	67	110	91	47	-20	-30%
Ethnicity						
White	1766	1897	738	252	-1514	-86%
African Am.	261	322	216	93	-168	-64%
Latino	223	340	171	74	-149	-67%
Asian/PI	69	71	53	21	-48	-70%
Native Am.	15	24	7	2	-13	-87%
Total	2334	2654	1185	442	-1892	-81%

* Cases reported may not be complete in later years.

New Cases, Deaths, and Numbers Living with AIDS, San Francisco, 1980-2000
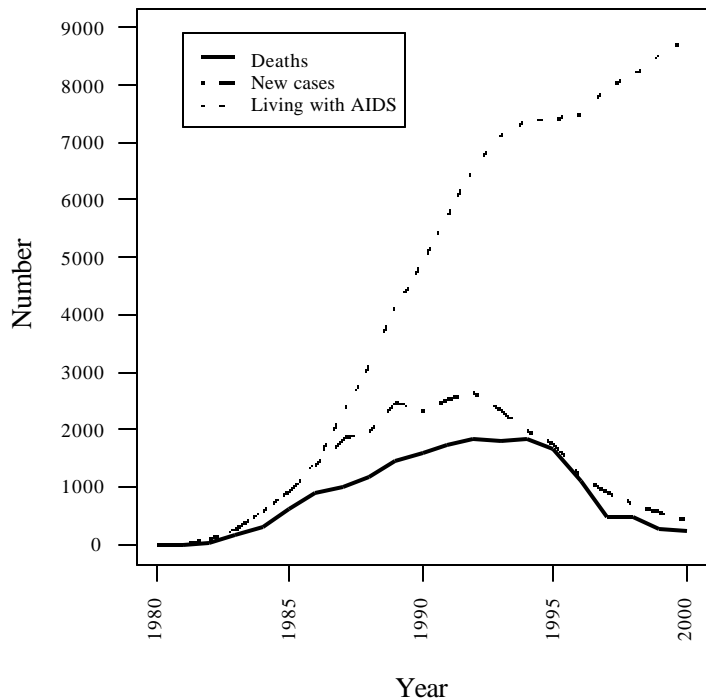
Communicable Disease

HIV/AIDS--continued

**MSM HIV Incidence Estimates,
San Francisco, 1997 and 2000**
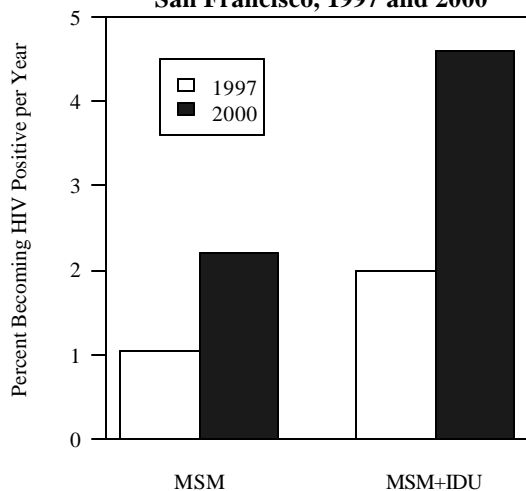
**Use of Highly Active Antiretroviral Therapy (HAART) among Persons
Living with AIDS between 1996 and 1999, San Francisco**

Population Group	Number of Cases	Percent Receiving HAART
Total	9001	65%
Sex		
Male	8489	65%
Female	512	58%
Race/Ethnicity		
White	6195	66%
African American	1389	58%
Latino	1047	66%
Asian	322	72%
Native American	48	73%
Transmission Category		
Men who have sex with men (MSM)	6531	68%
Injection drug user (IDU)	950	52%
MSM and IDU	1205	59%
Other	315	68%
Calendar Year		
1996	7043	41%
1997	7132	59%
1998	7380	66%
1999	7483	69%

Source: San Francisco Dept. of Public Health, HIV Seroprevalence and AIDS Surveillance Units
http://hivinsite.ucsf.edu/consensus/

SEXUALLY TRANSMITTED DISEASE

The number of reported sexually transmitted diseases (STDs) increased in 2000 over the previous year. Gonorrhea cases increased by 34 percent, chlamydia cases increased by 13 percent, and early syphilis cases increased by 61 percent. The number of cases remains far below the levels from twenty years ago, however, when San Francisco had 18,000 gonorrhea cases and 2000 early syphilis cases.

Recent analysis of data on reported cases and City Clinic medical record data has suggested that recent increases in STDs may be mainly among men who have sex with men, a group that would also be at increased risk for transmission of HIV. STD prevention efforts in 2001 will be focusing on this community.

Trends in reported STD cases by month, Decmber 1998 through December 2000.
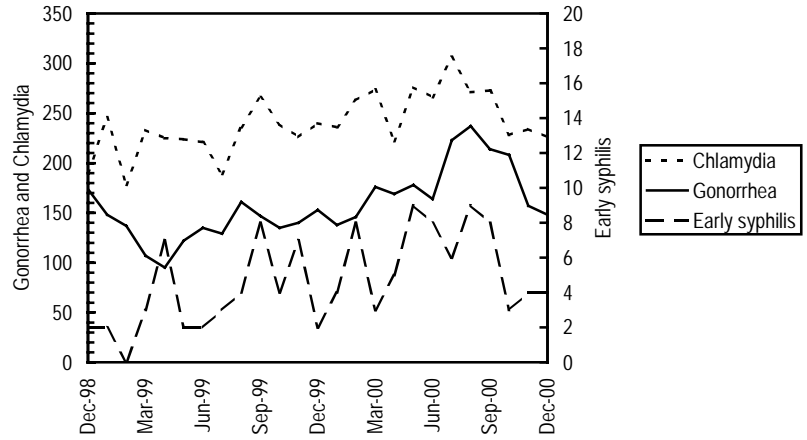
Sexually Transmitted Diseases among San Francisco Residents, 1998-2000

Disease	Number of Cases			Change, 1999-2000	Rates		
	1998	1999	2000		1998	1999	2000
Gonorrhea: All groups	1,850	1,609	2,140	33%	256	220	298
White	679	676	810	20%	201		243
Asian	60	61	91	49%	29	30	46
Hispanic	179	188	282	50%	178	187	282
African American	604	565	569	1%	791	740	751
Adolescents (<20)	250	205	178	-13%	493	580	503
M. rectal gonorrhea		159	199	25%			
	158						
Chlamydia	2,611	2,723	3,075	13%		369	430
Adolescents (<20)	892	715	810	13%	1758	2022	2291
Syphilis	129	126	157	25%			
Early syphilis	40	44	71	61%	6	6	3
Congenital syphilis	1	1	1				

Rates are cases per 100,000 population per year, based on 1990 census population, not adjusted.

Communicable Disease

TUBERCULOSIS

San Francisco led the nation in 1999 with the highest TB case rate. In 2000, the number of cases of TB were at an all-time low in San Francisco, but the disease is still alive and a concern, with a rate twice that of California and 3 times that of the nation. Much of this high rate continues to be driven by the large number of foreign born immigrants coming to San Francisco. The disease disproportionately affects those living in poverty and under crowded conditions (e.g., homeless and recent immigrants) and from countries where TB disease is endemic (e.g., the Philippines and China). TB still poses a threat to individuals living with AIDS; rates of coinfection remain at around 25%, despite falling number of cases. Collaborative community efforts have helped with monitoring of medication adherence and effectiveness and resulted in substantial decreases in drug resistance rates.

Source: San Francisco Dept. of Public Health, Tuberculosis Control
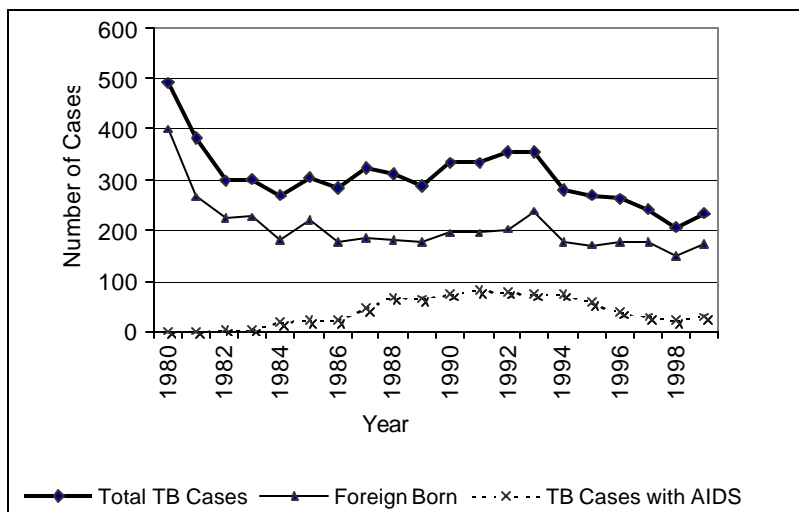
HEPATITIS C

Hepatitis C (HCV) is an important disease because it has a high incidence, is silent for many years, is infectious, and can cause long-term disability through chronic liver disease. The table below shows the estimated risk and prevalence in high-risk groups in San Francisco. Many of the risk factors for Hepatitis C are the same as those for HIV transmission.

Estimated San Francisco Hepatitis C infections by risk group

Population group	Risk prevalence est. Low	Risk prevalence est. High	Proportion in risk group	Number in risk group	SF estimated number Low	SF estimated number High
general pop.	0.02	0.02				17,647
				767,252	11,509	
IDU	0.72	0.86				14,706
				17,100	12,312	
STD hx	0.01	0.10	0.17			13,043
				130,433	1,304	
Abnormal ALT	0.10	0.18	0.05			6,905
				38,363	3,836	
2-9 sex partners	0.01	0.02	0.52			6,668
				333,421	3,334	
10-49 sex partners	0.03	0.03	0.22			4,232
				141,063	4,232	
50+ sex partners	0.06	0.16	0.04			4,104
				25,648	1,539	
Pre-1990 transfusion	0.05	0.09	0.06			4,143
				46,035	2,302	
MSM	0.02	0.18				7,020
				39,000	780	
Health workers	0.01	0.02	0.09			1,381
				69,053	691	
Others						745
				51,475	227	

note that categories are not mutually exclusive, so estimated numbers cannot be added together

Source: San Francisco Dept. of Public Health, Community Health Epidemiology and Disease Control

Non-Communicable Disease

**Cardiovascular Disease Mortality Rates
by Ethnicity, San Francisco,1994-1997**
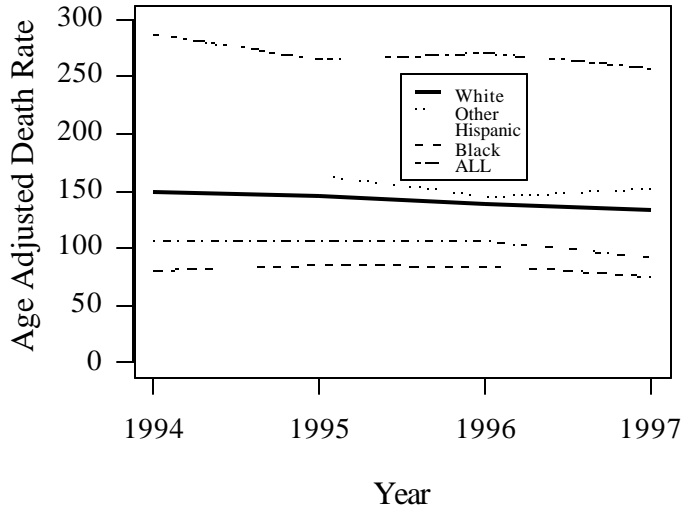
CARDIOVASCULAR DISEASE

Cardiovascular disease includes Ischemic Heart Disease (IHD), stroke, and other forms of heart disease. IHD is the leading cause of death for both men and women, and stroke is among the leading causes each year. Rates have been declining somewhat among all groups, but there are still very large differences across ethnic groups in San Francisco, as there are elsewhere. African Americans have by far the highest rates, well over twice that of the groups with the lowest rates, Asian/others and Hispanics. Whites' rates are in between, significantly lower than African Americans but still significantly higher than the other groups. IHD and stroke mortality rates among males of each ethnicity are significantly higher than rates among females. A large part of these differences can be attributed to differing exposures to well-established risks, including hypertension, diabetes, cholesterol, smoking, diet, exercise, and stress.

Source: California Department of Health Services Website, Vital Query System

DIABETES

Diabetes ranked 12th 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.

Diabetes prevalence increases with age and body weight, and is lower among college graduates (4%) than among those with no more than a high school education (7.2%). Diabetes has been increasing among California adults since the mid-1980s, especially among women. Statewide, Latinos/Hispanics (12.9%) and African-Americans (14.5) have higher rates than whites (4.3%).

Prevalence by ethnicity and sex for the Bay Area (San Francisco, San Mateo, Santa Clara, and Alameda counties) are shown in this graph. For those groups with sufficient data, the prevalence among Latino/Hispanic and African-American females was significantly greater than among white females. Where bars are missing, data were insufficient to produce a reliable estimate for that group.

Diabetes by Major Ethnicity Group, San Francisco,1994-1996

Non-Communicable Disease

HIGH BLOOD PRESSURE

High Blood Pressure by Major Ethnicity Group, San Francisco,1994-1996

High Blood Pressure (HBP), or hypertension, is the single most important risk factor for stroke. People with uncontrolled HBP are as much as seven times more likely to develop stroke than others, and three to four times as likely to develop heart disease as well. Most high blood pressure can be prevented or controlled by a combination of regular exercise, weight control, limiting sodium and alcohol in the diet, and, if necessary, prescription medications.

HBP prevalence has stayed relatively steady since the mid-1980s. Prevalence increases greatly with age. Sex differences in prevalence are relatively small, but there are significant ethnic differences. African-Americans have the highest prevalence; with men (41.5%) having significantly higher prevalence than Asian/other (15.6%), Latino/Hispanic (22.1%), or white (22.8%) men, and African American women (35%) being higher than white women (23.7%).

Bay Area prevalences are shown in the figure for groups for which data were sufficient to make reliable estimates. There are no significant male-female differences within ethnic groups. Among men, Latinos/Hispanics have significantly higher prevalence than Asian/other, and African-American women have significantly higher prevalence than women of any of the other ethnic groups.

Hypertension ranked 15th among contributors to overall burden of disease in San Francisco in 1998 (DALYs)
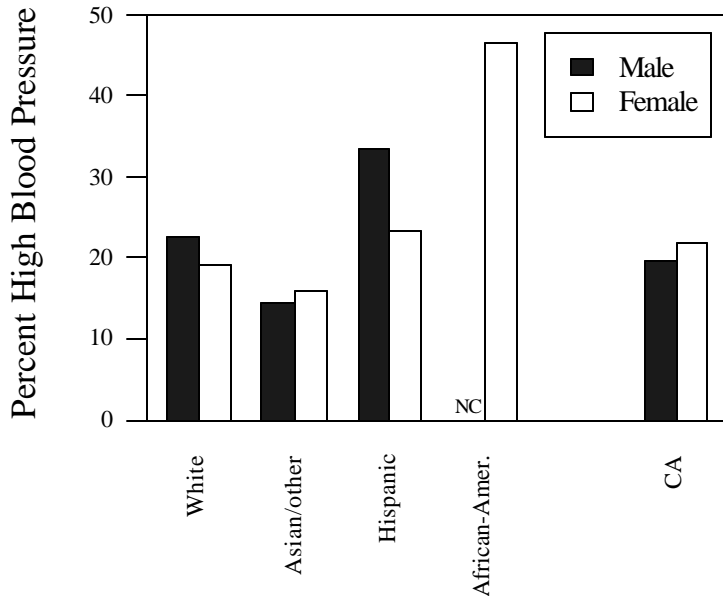

Source: Gazzinga JM, Kao C, et. al. *Cardiovascular Disease Risk Factors Among California Adults, 1984-1996.* Sacramento: California Department of Health Services and UCSF, Institute for Health and Aging, 1998. pp. 22,26. Missing/insufficient data due to small subgroup sample size (<50). Data from Ca. BRFS. Bay Area counties are SF, Alameda, San Mateo, and Santa Clara.

CANCER

From 1993 to 1997, the highest rate of cancer incidence (occurrence) among males was for prostate cancer, almost twice that of lung cancer. However, the death rate of lung cancer was 2.7 times that of prostate cancer.

San Francisco Cancer Incidence by Sex & Ethnicity, 1993 - 1997

	ALL No.	Males: All No.	Rate	LCI	UCI	1992-96 Rate	Males: Rates by Ethnicity White	Afr.-Amer.	Latino	Asian/Oth.
All cancers	20,632	11,698	512.9	503.4	522.5	543.3	601.9 **	724.3 ***	357.9	326.8
Prostate cancer	2,780	2,780	128.2	123.5	133.1	135.7	139.4 **	245.1 ***	94.6 *	71.8
Lung cancer	2,549	1,462	67.1	63.7	70.6	71.3	72.8 **	109.7 ***	30.8	57.5 *
Kaposi's sarcoma	1,306	1,296	44.7	42.2	47.2	57.4	66.8 ***	38.6 *	38.9 *	5.0
Colorectal cancer (invasive)	2,334	1,190	53.0	50.0	56.1	52.5	55.1 *	73.3 ***	33.8	49.4 *
Non-Hodgkin's lymphoma	1,289	986	38.9	36.4	41.5	42.8	52.1 ***	33.4 *	32.0 *	14.7
Bladder cancer	724	508	22.8	20.8	24.9	23.4	34 ***	18.3 *	12.6	9.7
Mouth/oropharynx cancers	563	384	18.0	16.2	19.9	18.8	19.8	25.6	11.9	16.1
Liver	410	315	14.7	13.1	16.4	14.0	9.6	15.9	10.5	23.4 *
Stomach cancer	498	298	13.4	11.9	15.0	13.5	11.1	26.8 ***	12.4	14.2
Melanoma/skin cancers (invasive)	466	269	11.5	10.1	13.0	11.7	21.0 *	--	2.1	--
Leukemia	441	242	11.4	9.9	12.9		12.9	13.3	9.0	8.3
Pancreas	436	197	9.0	7.8	10.3	9.9	9.3	15.3	8.4	6.9

	ALL No.	Females: All No.	Rate	LCI	UCI	1992-96 Rate	Females: Rates by Ethnicity White	Afr.-Amer.	Latino	Asian/Oth.
All cancers	20,632	8,934	325.8	318.6	333.1	329.6	402.3 ***	349.8 **	225.2	247.8
Breast cancer (invasive)	2,600	2,600	100.3	96.2	104.4	101.1	131.9 ***	104.8 **	65.6	65.2
Colorectal cancer (invasive)	2,334	1,144	36.6	34.3	38.9	37.7	40.6 *	32.0	26.4	35.9
Lung cancer	2,549	1,087	37.6	35.3	40.0	38.1	47.5 **	53.5 *	20.1	27.1
Breast cancer *(in situ)*	567	567	23.6	21.6	25.7	23.1	28.7 *	28.9 *	9.3	19.2*
Corpus uteri cancer	515	515	20.1	18.3	22.0	20.5	25.1*	17.8	10.2	16.6
Ovarian	375	375	14.6	13.1	16.3	14.4	20.4 *	9.0	13.0	9.8
Non-Hodgkin's lymphoma	1,289	303	10.7	9.4	12.0	11.3	11.7	10.1	11.0	8.7
Pancreas	436	239	7.2	6.2	8.2	7.1	7.3	16.0 ***	5.8	4.8
Cervix uteri	238	238	9.3	8.1	10.6	10.3	6.9	11.1	12.4	10.5
Bladder cancer	724	216	6.9	5.9	7.9	6.4	9.5 *	7.2	4.8	3.8
Stomach cancer	498	200	6.4	5.5	7.4	6.4	5.4	5.2	6.3	8.2
Leukemia	441	199	8.1	6.9	9.5	8.2	9.8	7.3	5.2	6.7
Melanoma/skin cancers (invasive)	466	197	7.7	6.6	8.9	7.3	15.1 *	--	1.7	0.6
Mouth/oropharynx cancers	563	179	6.7	5.7	7.7	6.7	7.4 *	6.7	2.2	7.1*
Kaposi's sarcoma	1,306	10	0.3			0.3	0.4	(<5)	(<5)	(<5)

Data are for 1993-1997. "No." is numbers of incident cases in 5-year period. Ranking is by sex-specific number of cases.

Rates are age adjusted to standard 1970 US population. (Not calculated for <5 cases.)

LCI, UCI are lower and upper 95% confidence intervals for rate estimates.

source: NCCC, *Cancer Incidence & Mortality in the SF Bay Area, 1988-1997*. March, 2000

website: http://www.nccc.org/Pubs/reg8annual.htm

*** Significantly higher than all other ethnicity groups of same sex

** Significantly higher than next highest ethnicity group of same sex

* Significantly higher than lowest ethnicity group of same sex

CANCER--continued

Among females, invasive breast cancer had the highest incidence, more than double that of lung and colorectal cancers, but the death rate from lung cancer was a third higher than that of breast cancer, and almost double that of colorectal cancer.

There are important differences by sex and ethnicity in both cancer incidence and mortality. African American males had significantly higher incidence and mortality than all other ethnic groups. Whites had the second highest incidence and mortality, significantly higher than Asians or Latinos. White females had significantly higher incidence than all other ethnic groups followed by African American females, but African American female's mortality was highest, followed by white females. Comparing 1993 –1997 rates to those for 1992 – 1996, male incidence and male and female mortality declined somewhat, despite data for 4 of the 5 years measured being the same.

San Francisco Cancer Mortality by Sex & Ethnicity, 1993 - 1997

MALE	All Males No.	Rate	LCI , UCI	1992-96 Rate	White No.	Rate	African-American No.	Rate	Latino No.	Rate	Asian/other No.	Rate
All cancers	4,048	179.4	173.8 , 185.1	188.2	2,219	196.9 **	554	297.4 ***	297	130.2	957	135.0
Lung cancer	1,111	50.5	47.5 , 53.6	53.8	582	54.3 **	173	92.8 ***	63	28.1	281	39.6
Prostate cancer	455	18.6	16.9 , 20.4	20.3	267	21.6 *	91	47.9 ***	36	14.7 *	58	7.4
Colorectal cancer	428	18.4	16.7 , 20.2	19.6	249	21.0 *	48	26.4 *	29	13.4	100	13.6
Liver cancer	223	10.4	9.1 , 11.8	10.5	68	6.3	25	14.1	22	10.2	107	15.9 *
Non-Hodgkin's lymphoma	201	8.5	7.3 , 9.7	8.1	123	10.2 *	14	7.3	25	9.5	38	5.1
Stomach cancer	181	8.1	6.9 , 9.3	8.3	69	6.2	31	16.6 *	20	8.9	61	8.5
Pancreas cancer	170	7.6	6.5 , 8.8	8.1	95	8.5	19	10.6	16	7.3	40	5.6
Leukemia	140	6.4	5.4 , 7.6	7.0	81	7.1	18	9.7	9	3.7	31	4.8
Esophageal cancer	112	5.1	4.2 , 6.1	5.6	63	5.9 *	18	9.9 *	5	2.2	26	3.7
Mouth/oropharynx cancers	104	4.9	4.0 , 6.3	5.3	44	4.3	15	8.6	12	5.2	33	5.0

FEMALE	All Females No.	Rate	LCI , UCI	1992-96 Rate	White No.	Rate	African-American No.	Rate	Latino No.	Rate	Asian/other No.	Rate
All cancers	3,717	120.8	116.6 , 125.1	130.1	2,157	141.4 **	468	179.6 ***	270	83.5	808	89.4
Lung cancer	824	26.6	24.7 , 28.6	27.1	515	34.8 **	106	42.5 *	40	10.9	161	17.1
Breast cancer	560	19.9	18.2 , 21.7	20.3	336	24.4 **	82	32.4 *	43	14.9	97	11.6
Colorectal cancer	465	13.7	12.3 , 15.1	13.0	261	14.8 *	50	18.8 *	26	7.5	125	13.1 *
Pancreas cancer	220	6.5	5.6 , 7.4	6.4	129	7.4 *	38	13.3 ***	16	3.9	36	3.9
Ovarian cancer	193	6.8	5.8 , 7.9	7.2	128	9.1 *	12	4.5	23	7.2	30	3.9
Non-Hodgkin's lymphoma	150	4.4	3.6 , 5.2	4.8	99	5.4	11	4.0	13	3.5	27	3.1
Leukemia	147	5.2	4.2 , 6.1	4.9	86	6.0	11	4.1	13	4.8	37	4.4
Stomach cancer	120	3.7	3.0 , 4.4	3.8	54	3.0	8	2.3	12	4.1	46	5.0
Cervix uteri cancer	95	2.6	2.3 , 3.6	3.1	60	3.4	16	5.9 *	5	1.6	14	1.6
Corpus uteri cancer	70	2.6	2.0 , 3.3	3.1	25	2.4	12	4.0	10	3.9	23	2.5

Data are for 1993-1997. "No." is numbers of deaths in 5-year period. Ranking is by sex-specific number of deaths.

Rates are age adjusted to standard 1970 US population. (Not calculated for <5 deaths.)

LCI, UCI are lower and upper 95% confidence intervals for rate estimates.

*** Significantly higher than all other ethnicity groups of same sex

** Significantly higher than next highest ethnicity group of same sex

Source: NCCC, Cancer Incidence & Mortality in the SF Bay Area, 1988-1997. March, 2000
http://www.nccc.org/Pubs/reg8annual.htm

ASTHMA

Asthma ranked 9th among contributors to overall burden of disease in San Francisco in 1998 (DALYs).

Hospitalization rates for asthma declined for all groups from 1991 – 1994 and from 1995 - 1997, both overall and among children. However San Francisco still continued to rank among the highest for asthma hospitalization rates for each ethnic group compared to other California counties. African Americans have significantly higher rates than other ethnic groups both overall and among children, and Latino/Hispanic children have significantly higher rates than whites and Asian/P.I. children.

Asthma Hospitalization Rates by Ethnicity, San Francisco, 1991-94 and 1995-97

	1991-1994				1995-1997			
	SF Rate	95% Conf. Interval	SF Rank	Counties Ranked	SF Rate	95% Conf. Interval	SF Rank	Counties Ranked
Children 0-14								
White	345	(313-378)	2	52	221	(193-252)	6	44
African-American	805	(740-872)	6	30	664	(594-737)	9	23
Hispanic	556	(505-610)	1	35	351	(310-393)	2	30
Asian/other*	443	(410-477)	1	29	213	(189-239)	1	19
All Ages								
White	151	(143-158)	7	57	128	(119-173)	8	55
African-American	515	(490-540)	5	35	463	(435-492)	5	29
Hispanic	208	(195-222)	2	39	134	(122-147)	4	34
Asian/other*	177	(168-186)	1	36	113	(106-121)	1	23

Category defined as "Asian/other" in 1991-94, and as "Asian/Pac. I." in 1995-97.

Rates are per 100,000age-adjusted to the standard 1940 population.

Ranks are among counties with at least 20 cases, with ranking from 1=highest rate.

Source: California Dept. of Health Services, *County Asthma Hospitalization ChartBook, 1997* and *2000.*
Cited in Jennifer Mann, "Asthma in San Francisco." November 2000. San Francisco Dept. of Public Health
http://www.dph.sf.ca.us/Reports/asthma00.pdf

Mental Health

**Estimated Seriously Mentally Ill and Unmet Need
by Age, San Francisco 1997-1998**

**Suicide Deaths in San Francisco,
1989-90 to 1999-2000**
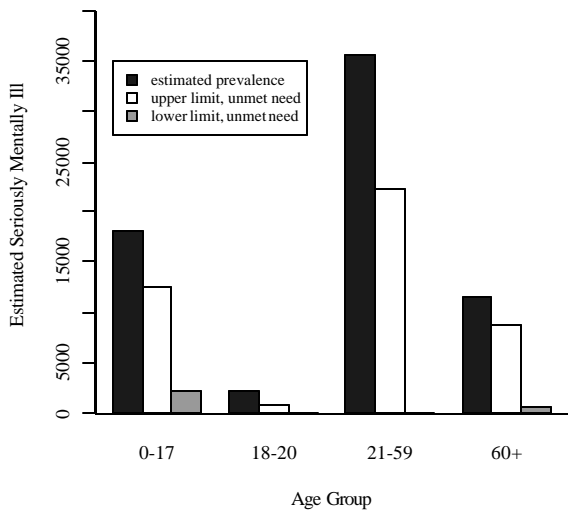
MENTAL ILLNESS

The California Mental Health Planning Council developed estimates for California counties of prevalence of serious mental illness, along with estimated levels of unmet need for mental health services for the people with these conditions. San Francisco's prevalence rate is believed to have been underestimated, but at 7.84% was still the highest among the counties. The upper and lower limit estimates shown here are based on different assumptions about the extent of private care, after accounting for those receiving services through the public system.

The Disability Adjusted Life Years (DALYs) method ranks psychiatric diagnoses related to alcohol dependence as the second leading cause of years of healthy life lost. Depression was the 5th leading cause, and suicide was the 14th.
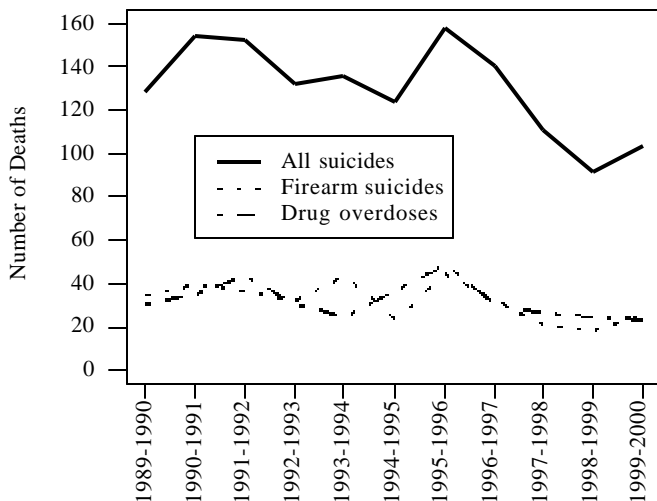
SUICIDE

Between 1997 – 1999 there was a decline in the overall number of suicides. The number of suicides can only reflect those cases that can be positively determined to be suicides. It is assumed that some suicides are not classified as such. The two leading methods of suicide are by firearm and by drug overdose.

Source: San Francisco Office of Medical Examiner. Annual Report (various years)
Ca. Mental Health Planning Council, Ca. Mental Health Master Plan (draft). Chapter 2, Unmet Need. Sacramento, Ca. 2000
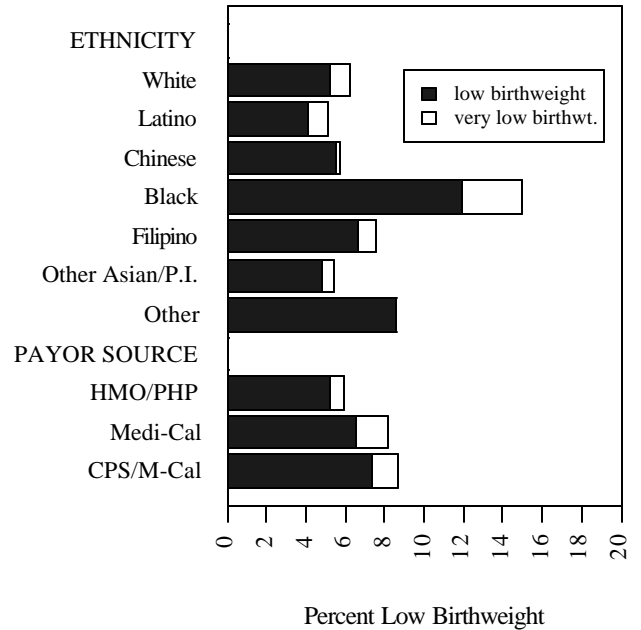
Maternal and Child Health

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.
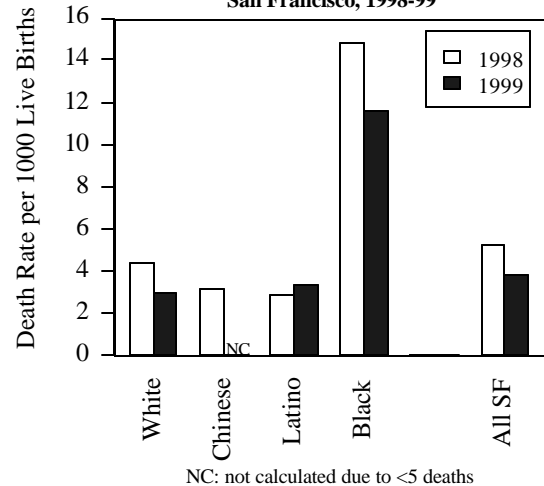
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INFANT MORTALITY

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. In San Francisco, infant mortality rates declined for all groups except Latinos between 1998 – 99. Infant death rates are still much higher for African Americans in San Francisco than for any other group measured.

Low Birthweight by Mother's Ethnicity and Primary Payor Source, San Francisco, 1999

Legend:
- ■ low birthweight
- □ very low birthwt.

Percent Low Birthweight

Infant Death Rates by Mother's Ethnicity, San Francisco, 1998-99

Death Rate per 1000 Live Births

Legend:
- □ 1998
- ■ 1999

NC: not calculated due to <5 deaths

Source: San Francisco Dept. of Public Health, Records & Statistics

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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 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 probably 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 indicates that rates or prevalences 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 deaths/100,000=100 deaths per 100,000). Put another way, rates 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. (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

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Technical Notes

in both the size and age distribution of populations; the resulting age-adjusted rates are synthetic but can be used to compare the overall degree or force of mortality or morbidity across populations with different age distributions.

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 is now being 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 proportionally 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.

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).

The other main source of mortality data used here is San Francisco Office of Medical Examiner (ME) data. The ME does not process all deaths, but does cover all injury deaths. We use ME data in this report for injury deaths. Compared to state death files, this data source has three main differences: it is reported by fiscal year (July-June) rather than calendar year; it covers deaths occurring to people in San Francisco, regardless of their place of residence; and causes of death and their categorization are determined by the Medical Examiner.

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

Cause of death coding. Causes of death through 1998 were coded in categories of the International Classification of Diseases, 9th Revision (ICD-9). Starting in 1999, deaths are being 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.

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.

     Ethnicity from birth records refers to mother's ethnicity.

     San Francisco Unified School District data reported cover 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.

     Immigration data covers port of entry of documented immigrants, and excludes 1986 IRCA entrants and undocumented immigrants. Years refer to federal fiscal year, from October of year given through following September.

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, or a single parent who is working.

Substance abuse. Data on hospitalizations are from the Patient Discharge Data files of the Office of Statewide Health Planning and Development (OSHPD). The graph shows drug-and-alcohol-related first 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.

Technical Notes

Newer local estimates have not been developed, so data shown are the same as in last year's Overview for smoking, physical inactivity and overweight. New estimates will be available next year from the California Health Interview Survey.

Unintentional injuries. Data on injuries come from the San Francisco Office of Medical Examiner (ME)(deaths) and California Highway Patrol (motor vehicle collision injuries), and so refer to deaths or injuries that occurred in San Francisco, regardless of place of residence of the injured persons. For this reason, and because the ME reports by fiscal year rather than calendar year, 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.

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. The Major Causes of Death table is the only mortality data reported here from 1999 from the state master file, coded using the new ICD-10 classification and groupings and 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).

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 for hepatitis C for San Francisco are not valid because they are based on incomplete reporting.

Non-communicable disease. Newer local estimates have not been developed, so data shown are the same as in last year's Overview for cardiovascular disease, hypertension and diabetes. New estimates will be available next year from the California Health Interview Survey.

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

Mental health. "Serious mental illness" is the category estimated for the adult age groups. For children 0-17, "severe emotional disturbance" (SED) is the category, and estimates are based on data for ages 9-17 because no useable data for younger children are available. The estimates were developed in conjunction with the California Department of Mental Health and county mental health directors, including feedback from San Francisco DPH staff. Some but not all of this information was incorporated into the estimate for San Francisco. Factors which couldn't be incorporated were noted, along with the observation that the figures cited were likely to underestimate the prevalence of serious mental illness in San Francisco.

Suicide deaths were those determined to be suicides by the ME.