San Francisco

2002 Overview of Health

Who We Are	How We Live
	Our Health

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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 1- 5, 2002. 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.

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.

This year's *Overview* includes the latest available data 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.

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."

Field Model of Health
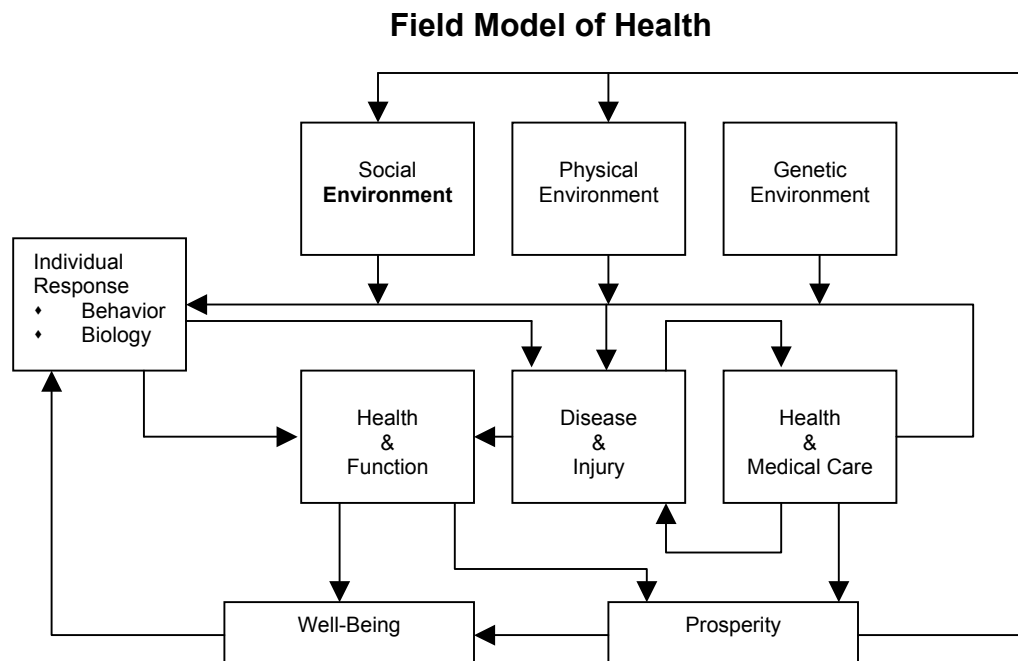
Introduction

In general, the determinants that appear 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 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. To begin organizing this complexity into pieces of evidence, we turn to another figure, the "simplified causal web linking exposures and outcomes" on the next page.

Web of Causation and Public Health

The causal web on the next page is "simplified" by the absence of specific examples and the lines that connect them. Such examples can be drawn from this report, which has been influenced by *Healthy People 2010* and by the World Health Organization's *The Solid Facts*. Each of these highly-regarded reports has identified a list of key determinants of health:

The Solid Facts (WHO)	Healthy People 2020 (DHHS)
The Social Gradient	Physical Activity
Stress	Overweight and Obesity
Early Life	Tobacco Use
Social Exclusion	Substance Abuse
Work	Responsible Sexual Behavior
Unemployment	Mental Health
Social Support	Injury and Violence
Addiction	Environmental Quality
Food	Immunization
Transport	Access to Health Care

Introduction

Simplified causal web linking exposures and outcomes
Adapted from Murray & Lopez, *Epidemiology* 1999;10:594
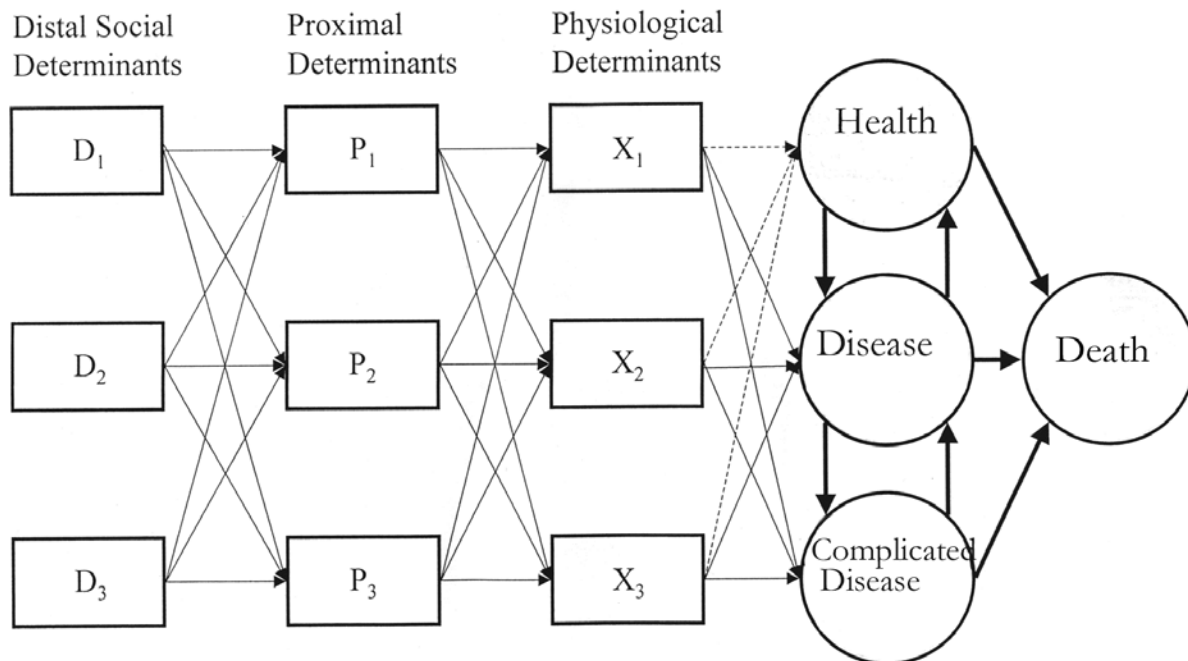
To illustrate how this model might work, consider heart disease, which is the leading cause of premature death in every zip code and among every ethnic group in San Francisco. Distal social determinants such as stress, work strain, and socioeconomic context contribute directly to heart disease, and also to greater exposure to such proximal determinants of heart disease such as physical inactivity, poor diet, and smoking. Poor diet and physical inactivity lead to obesity, hypertension, diabetes, and lipid disorders, all of which are physiological determinants of heart disease. Smoking increases the risk of heart disease by adversely affecting such physiological determinants as lipid profile, risk of diabetes, and by other mechanisms. Each determinant influences multiple outcomes. For this reason, our report takes very seriously all of the possible influences on the health of San Franciscans.

By assessing our population's health in this manner, and by implementing prevention efforts that are informed by this assessment, we hope to address the two main goals of *Healthy People 2010:* increase the quality and years of healthy life, and eliminate health disparities.

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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This report can be downloaded from our web page at www.dph.sf.ca.us, or copies can be obtained from:
Community Programs
San Francisco Dept. of Public Health
(415) 255-3470

Sources:

1. RG Evans & GL Stoddart. *Producing health, consuming health care. Soc. Sci. Med.*
Vol. 31, No. 12, pp 1347 – 1363, 1990.

2. CJ Murray & AD Lopez. *On the comparable quantification of health risks: lessons from the Global Burden of Disease Study. Epidemiology.* Vol. 10, No. 5, pp 594-605, 1999.

3. R Wilkinson & M Marmot. *The Solid Facts: Social Determinants of Health.* WHO Regional Office for Europe. 1998.

4. DHHS. Healthy People 2010. http://www.health.gov/healthypeople/
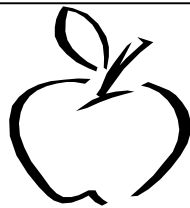
San Francisco

Who We Are

Introduction

"Who We Are" refers to the characteristics of the population of San Francisco including age, sex and ethnicity. We see differences in health, and social issues relevant to health, across the diverse communities that make up San Francisco's population. Women and men face many different health and social concerns; there is wide disparity among ethnic groups in relation to health and social issues; and our aging population increasingly affects San Francisco's health needs.

Demographics

Population by Major Ethnicity Group, San Francisco 1990 and 2000 and California, 2000

Legend:
- 1990 SF Census Number
- 2000 SF Census Number
- 2000 SF Census Percent
- 2000 Ca Census Percent

Y-axis: Number (10,000s) or Percent (0 to 60)
X-axis (Major Ethnicity Group): White NH, Asian/Pacl NH, Hispanic, Black NH
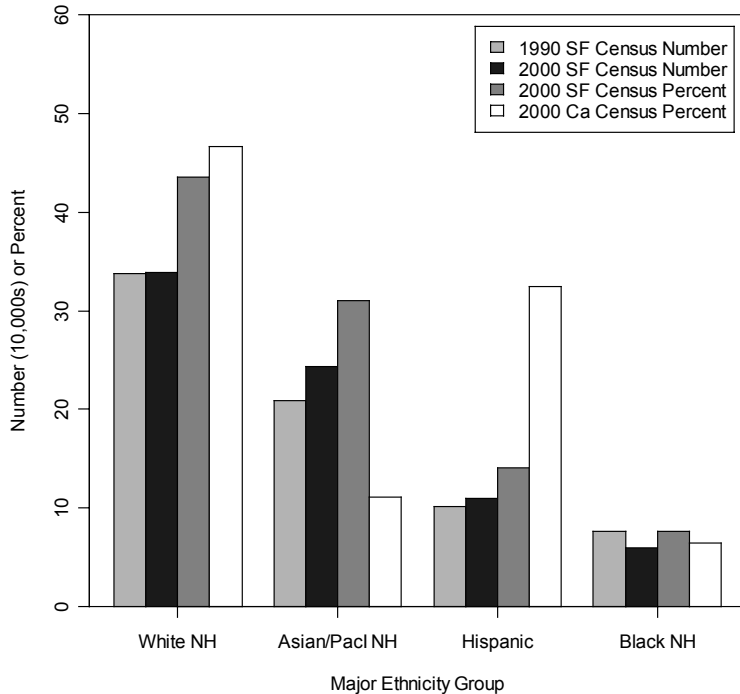
POPULATION

According to the 2000 U.S. Census, San Francisco has the eleventh largest population among California counties. Since 1990 San Francisco's population has increased 7.3% in contrast to a statewide increase of 13.9%. When compared to California as a whole, San Francisco's population is significantly older, with only 14.5% under the age of 18 compared to 27.3% statewide, and 13.7% over 65 verses 10.6% statewide. San Francisco's ethnic makeup is also unique when compared to the rest of the State with a significantly larger proportion of Asian/Pacific Islanders (31.3% vs. 11.2%), and smaller proportions of Latinos (14.1% vs. 32.4%) and Whites (49.7% vs. 59.5%). Over 30% of the births in San Francisco were to White mo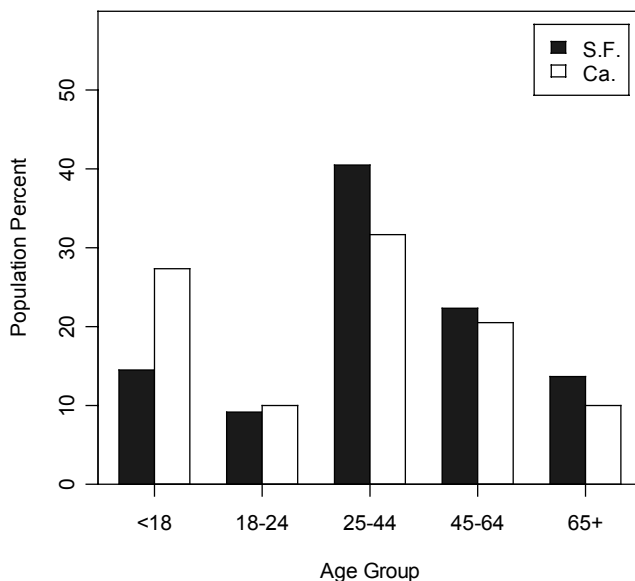thers. Latino and Chinese women have the second and third highest birth rates respectively. Asian/Pacific Island women or women who identify as more than one race have the lowest rates of birth among San Franciscian woman. Teen mothers (under 18 years old) are disproportionately African American and Latina, but SF does not have a high teen birth rate.

Population by Age Group San Francisco and California, 2000

Legend:
- S.F.
- Ca.

Y-axis: Population Percent (0 to 50+)
X-axis (Age Group): <18, 18-24, 25-44, 45-64, 65+

Resident Births by Mother's Ethnicity and Teen Births, San Francisco, 2000

Legend:
- %of all births
- % of ethnicity's mothers < 18

Y-axis: Percent (0 to 50)
X-axis: White, Latino, Chinese, Black, Filipino, Other Asian/P.I., 2+ races

Who We Are
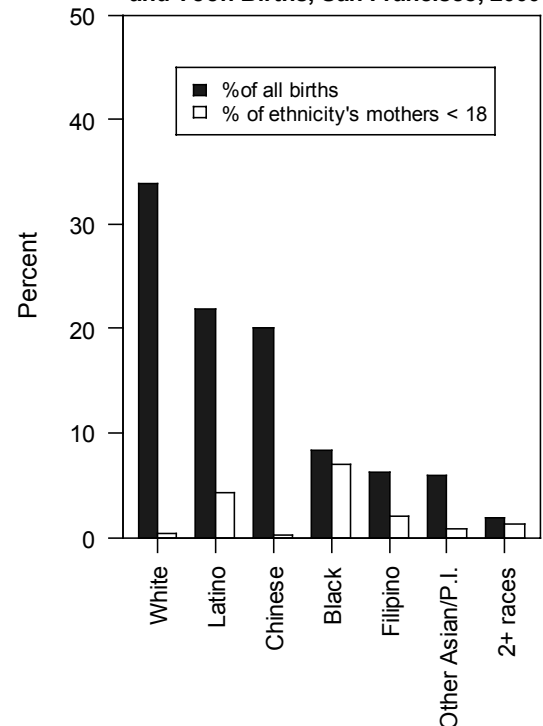
Demographics

San Francisco Population by Household Type and Age, 2000

	ALL				Children < 18			People > 65		
	House-holds	%	People	%	House-holds	People	%	House-holds	People	%
All	--		776,733	100%	--	112,802	100%	--	106,111	100%
Households	329,700	100%	756,976	97%	67,074	112,021	99%	78,716	102,016	96%
Non-Family Households	184,514	56%	264,715	34%	846	3,122	3%	36,030	37,767	36%
Single-person	127,376	39%	127,376	16%	--	--		32,257	32,257	30%
Male	63,760	19%	63,760	8%	--	--		9,978	9,978	9%
Female	63,616	19%	63,616	8%	--	--		22,279	22,279	21%
Other householder	57,138	17%	57,138	7%	846	846	1%	3,030	3,030	3%
Male	33,141	10%	33,141	4%	471	471	0%	1,456	1,456	1%
Female	23,997	7%	23,997	3%	375	375	0%	1,574	1,574	1%
Other non-relatives	--		80,201	10%	--				2,480	2%
Group quarters	--		19,757	3%	--	781	1%	--	4,095	4%
Family Households	145,186	44%	466,921	60%	63,021	92,905	82%	42,686	64,249	61%
Married couple	104,310	32%			40,269	70,331	62%	21,839		0%
Other householder	40,876	12%			19,244	22,574	20%	8,741		0%
Male (no wife)	11,674	4%			4,384	4,617	4%	1,717		0%
Female (no husband)	29,202	9%			14,860	17,957	16%	7,024		0%
(Related child)	--				3,207	15,839	14%	--		0%
(Non-relatives)	--		25,340	3%	--			--	1,600	2%
(With 1+ non-relatives)	72,892	22%								

People < 18 in families for married couples and other householders refers to own children
source: Ca. Census Data Center, US Census 2000 Summary File 1, 2001; pp. 381-385
http://www.dof.ca.gov/HTML/DEMOGRAP/2000Cover1.htm

Population—continued

The composition of San Francisco households reflects the City's large number of single individuals. When compared to California as a whole, San Francisco has almost twice the number of non-family households and larger numbers of men and women living alone. San Francisco also has less than half of the number of households with children under the age of 18 when compared to California as a whole.

When compared to California as a whole, San Francisco has almost twice the proportion of non-family households. These include 127,000 single person households, split evenly between men and women. However, a third of single person households of women are over 65, while only a sixth of those of men are.

Less than half of San Francisco's households are families (defined as having related persons living together). Even among married-couple families, only 40% have children under 18 in the household.

Household Composition, San Francisco and California, 2000
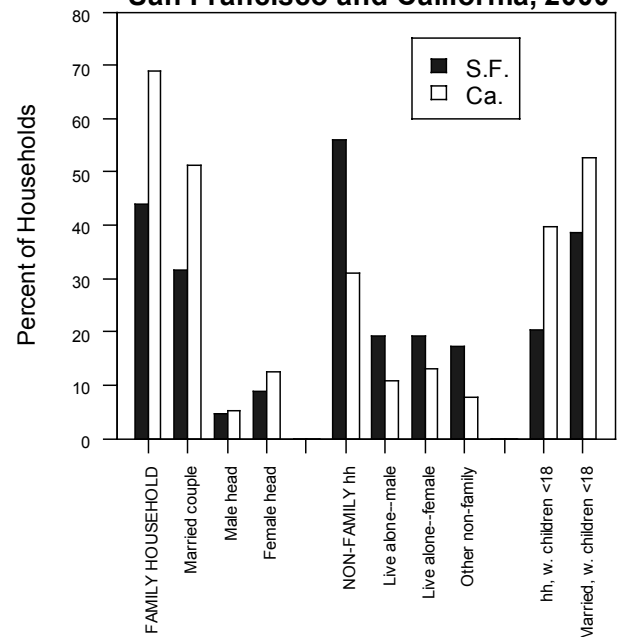
Demographics

Population—continued

San Francisco's households include a great deal of linguistic diversity. This figure shows that almost half as many households speak any of the Asian languages (primarily Cantonese) as speak English, and about half that number speak Spanish. The dark part of the bars represents "linguistic isolation", meaning households without an English speaker in them. Such households may of course not be linguistically isolated from others in their communities.

**Languages Spoken & Linguistic Isolation,
San Francisco Households, 1999**

Legend:
■ Linguistically isolated
□ Not ling. isolated

Households (1,000s)

Who We
Are
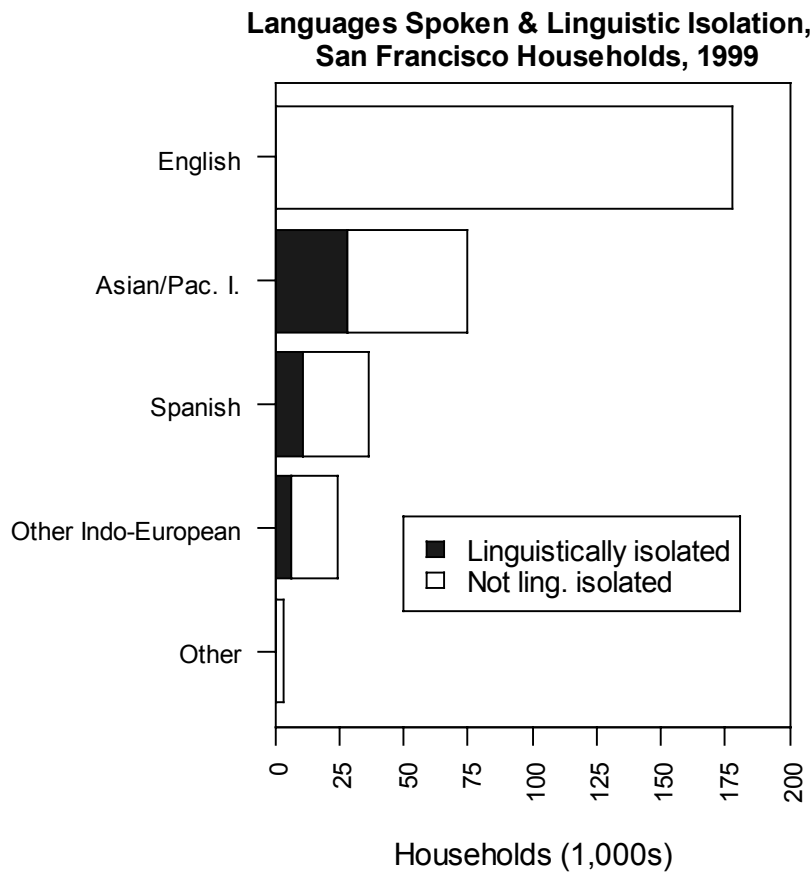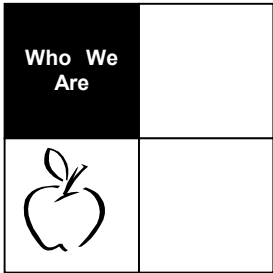
Demographics

IMMIGRATION
The composition of San Francisco's population continues to be affected by the many immigrants coming into the City. About 2 out of 5 San Francisco residents were born in foreign countries. They are split fairly evenly among those arriving here over each of the last decades.

Residents by Place of Birth and Decade of Immigration,San Francisco, 1999

San Francisco
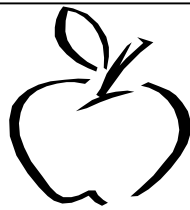
How We Live

Introduction
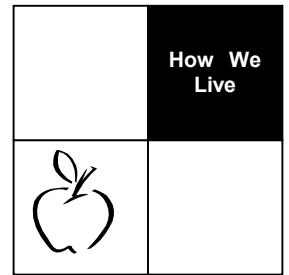
"How We Live" includes conditions of our social and physical environments, and actions we take that increase or decrease our risk of injury or illness. These conditions an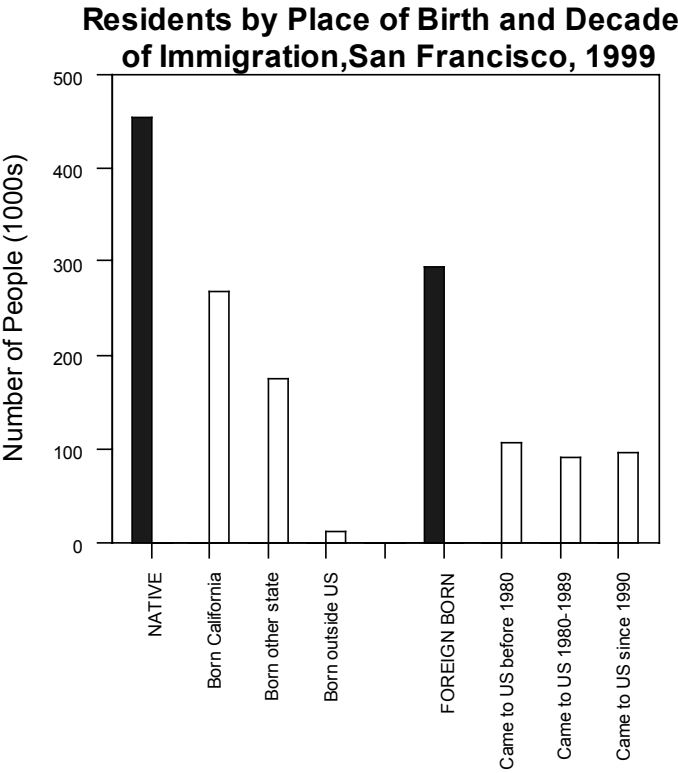d actions are important in determining how long we will live and how healthy we will be throughout our lives. The environments that surround us at home, on the streets, in our neighborhoods, in school, and at work, all influence our health. The air we breathe, the conditions that favor tobacco use or exposure to gun violence, how long and hard we work, 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. Much of the disease and injury experienced by San Franciscans could be prevented or postponed by changes in how we live.

Economic Conditions

POVERTY

Poverty continued to be highest among youth, with the highest levels among young adults 18-24 (20%) followed by children under 18 (16%). Among households, single-parent households had much higher poverty rates than married-couple families. Non-families, which in SF constitute more households than families, have poverty rates almost as high as those of non-married couple families.

The disparities in poverty rates for families by ethnicity differ by family composition, as shown in the table. Within each ethnicity, poverty rates are higher among non-couple families than among married-couple families, and among non-couple families, higher among female-headed households than among male-headed households.

Income in the past 12 months below poverty level by age and household type, San Francisco 1999

San Francisco County, CA	Poverty Estimate	Non-poverty Estimate	% of pov. Status
Individuals	84,981	651036	11.5%
0 to 18 years	19,347	102,797	15.8%
18 to 24 years	13,249	52,731	20.1%
25 to 44 years	24,491	243,933	9.1%
45 to 64 years	16,018	153,398	9.5%
65 years and over	11,876	98,177	10.8%
Households	34,655	281,391	11.0%
Married couple	4,923	101,602	4.6%
w. children <18	3,105	43,006	6.7%
Other family	7,541	41,130	15.5%
Non-family	22,191	138,659	13.8%

Poverty Status of Families in Past Year by Family Type and Presence of Children, San Francisco, 1999

Type of Family	% in Poverty				% of All Families in Poverty
	White, NH	Asian, NH	Latino	Black, NH	
Married-couple family:	2.1%	6.5%	5.8%	3.5%	39.5%
With related children under 18 years:	2.0%	7.7%	10.3%	5.8%	24.9%
No related children under 18 years	2.1%	5.1%	1.0%	1.6%	14.6%
Other family:	8.0%	12.0%	14.0%	26.4%	60.5%
Male householder, no wife present:	6.7%	8.0%	9.5%	7.2%	8.9%
With related children under 18 years:	19.2%	10.7%	13.9%	16.0%	5.9%
No related children under 18 years	0.0%	6.5%	5.4%	5.0%	3.0%
Female householder, no husband present:	8.6%	13.8%	15.9%	31.0%	51.6%
With related children under 18 years:	16.4%	25.1%	19.0%	37.7%	40.8%
No related children under 18 years	2.7%	7.2%	9.8%	16.9%	10.7%

Source: US Census, ACS

How We Live
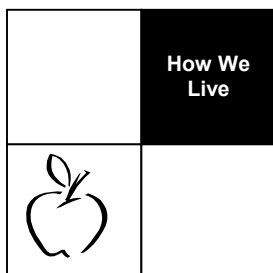
Economic Conditions

Household Income by Family Status, San Francisco 1999

Household Income	All Households			Families			Non-Family		
	No.	%	cum %	No.	%	cum %	No.	%	cum %
Total:	316,046	100.0%		155,196	100.0%		160,850	100.0%	
<$15,000	52,126	16.5%	16.5%	17,148	11.0%	11.0%	36,644	22.8%	22.8%
$15,000 to $29,999	48,337	15.3%	31.8%	22,377	14.4%	25.5%	27,280	17.0%	39.7%
$25,000 to $49,999	62,591	19.8%	51.6%	31,006	20.0%	45.4%	32,447	20.2%	59.9%
$50,000 to $74,999	57,452	18.2%	69.8%	29,350	18.9%	64.4%	27,349	17.0%	76.9%
$75,000 to $99,999	34,748	11.0%	80.8%	19,600	12.6%	77.0%	13,764	8.6%	85.5%
$100,000+	60,792	19.2%	100.0%	35,715	23.0%	100.0%	23,366	14.5%	100.0%

cum. % = cumulative percent

Poverty—continued

More than half of SF's households made less than $50,000 a year, and almost a third made less than $30,000. A higher proportion of family households made higher incomes than non-family households.

Many households derive income from sources other than wages, including 40% who get interest, dividends, or rent and 25% who get Social Security benefits. While only 3% get cash benefits from public assistance programs, 20% get cash or non-cash benefits (such as childcare or housing subsidies).

San Francisco families send a lot of members to work. Among married couple families, more than two-thirds have at least two workers.

Household Income Sources and Number of Workers in Families, San Francisco 1999

	Number	Percent
Households' Income sources:		
Households	316,046	100%
interest, dividends, rent	125,024	40%
Social Security	77,995	25%
Supplemental Security Income (SSI)	24,157	8%
Public Assistance income	10,913	3%
Public Assitance income or noncash benefits	62,885	20%
Families by number of workers:		
Families	155,196	100%
Married couple families	106,525	69%
0 workers*	14,531	14%
1 worker*	20,494	19%
2 workers*	52,885	50%
3 workers*	18,615	17%

* Percent of married couple families
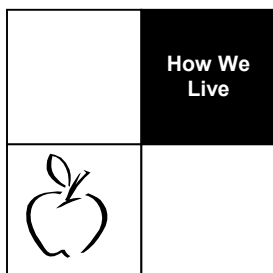
Economic Conditions

COST OF LIVING

San Francisco's high cost of living is summarized in the costs, calculated by the California Budget Project, for various types of families to subsist at a modestly comfortable level in the Bay Area*. This level, which we call the "modest standard of living" (MSOL), is probably underestimated for San Francisco itself, because the Fair Market Rent for apartments is higher in the City than the figures reflected here for the Bay Area. The hourly basic family wages needed to achieve these income levels are shown.

The Bay Area figures are around one-fifth higher than the statewide MSOL levels. The bottom of the table shows that certain low-income standards, including the statewide minimum wage (which was just raised to this level this year) and the federal poverty level (FPL), provide only a fraction of what families need to live minimally comfortably here.

* "Bay Area" refers to Alameda, Contra Costa, Marin, San Mateo, Santa Clara, and San Francisco counties).
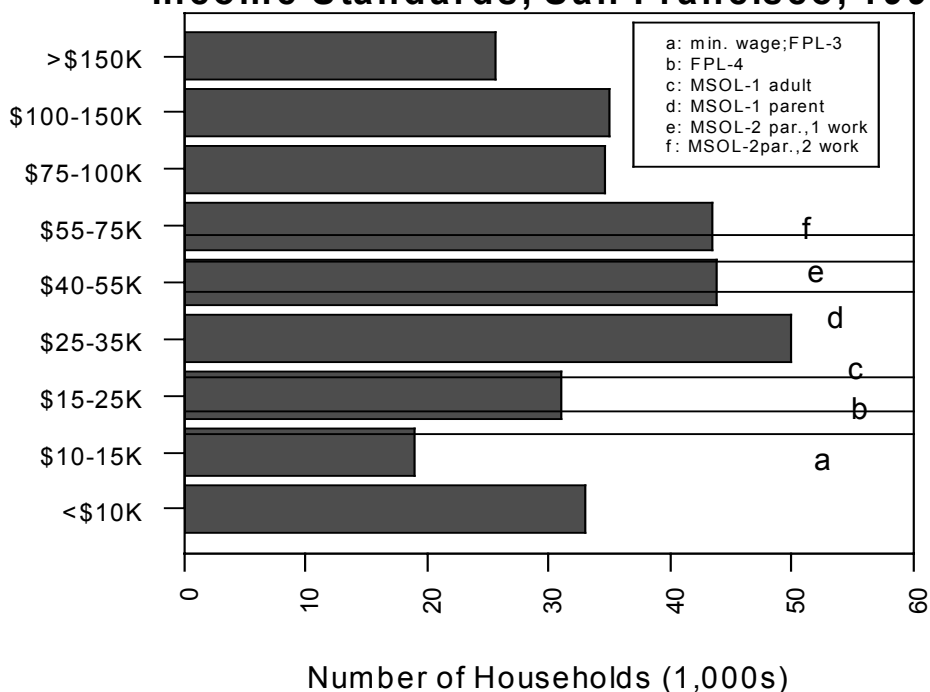
Modest Standard of Living (MSOL): Expenses Per Month and as a Percent of Income
San Francisco Bay Area, 2001

		Single Adult	Single Parent	Two Parents (One Working)	Two Parents (Two Working)
Housing & utilities	$ $	842	$ 1,270	$ 1,270	$ 1,270
	%	41%	28%	36%	25%
Child care	$	0	1032	0	1032
	%	0%	23%	0%	20%
Transportation	$ $	274	$ 274	$ 274	$ 494
	%	14%	6%	8%	10%
Food	$ $	182	$ 445	$ 638	$ 638
	%	9%	10%	18%	12%
Health care	$ $	134	$ 329	$ 391	$ 391
	%	7%	7%	11%	8%
Miscellaneous	$ $	179	$ 341	$ 429	$ 429
	%	9%	8%	12%	8%
Taxes	$ $	426	$ 815	$ 523	$ 879
	%	21%	18%	15%	17%
MONTHLY TOTAL	$	2,037	$ 4,506	$ 3,525	$ 5,133
ANNUAL TOTAL	$	24,442	$ 54,069	$ 42,304	$ 61,593
CALIFORNIA STATEWIDE	$	20,503	$ 43,443	$ 36,245	$ 52,034
HOURLY BASIC FAMILY WAGE	$	11.75	$ 25.99	$ 20.34	$ 14.81
Income standard levels…					
…As % of MSOL basic family wage income					
Ca. Minimum Wage ($6.75/hr.)	$	14,040	$ 14,040	$ 14,040	$ 28,080
Min. wage as % of MSOL		57%	26%	33%	46%
Federal Poverty Level (FPL)	$	14,630	$ 14,630	$ 17,650	$ 17,650
FPL as % of MSOL		60%	27%	42%	29%
SF living wage ($10/hr.)	$	20,800	$ 20,800	$ 20,800	$ 41,600
Living wage as % of MSOL		85%	38%	49%	68%

Source: U.S. Census, American Community Survey
Source: Ca. Budget Project, Sept. 2001

How We Live

Economic Conditions

Household Income and Selected Income Standards, San Francisco, 1999

a: min. wage;FPL-3
b: FPL-4
c: MSOL-1 adult
d: MSOL-1 parent
e: MSOL-2 par.,1 work
f: MSOL-2par.,2 work

Number of Households (1,000s)

INCOME

This figure shows San Francisco's estimated household income distribution, with various income standards shown for reference. It shows that, while a substantial number and proportion of households have higher incomes, there are also very many who make less than the basic family wage needed for families to live modestly. The households include a large number of non-families, most of them single-person households, but even so, more than 50,000 such households have incomes below the level of the California minimum wage.

Economic Conditions

Income—continued
This map shows the areas of highest and lowest population density in
the City. It complements the next map, showing income levels. Many of
the most densely populated areas correspond with low income areas,
including Chinatown, North Beach, the Tenderloin, Western Addition,
and the Mission.

Population Density by Census Tract with Zip Code Boundaries
San Francisco, 1999
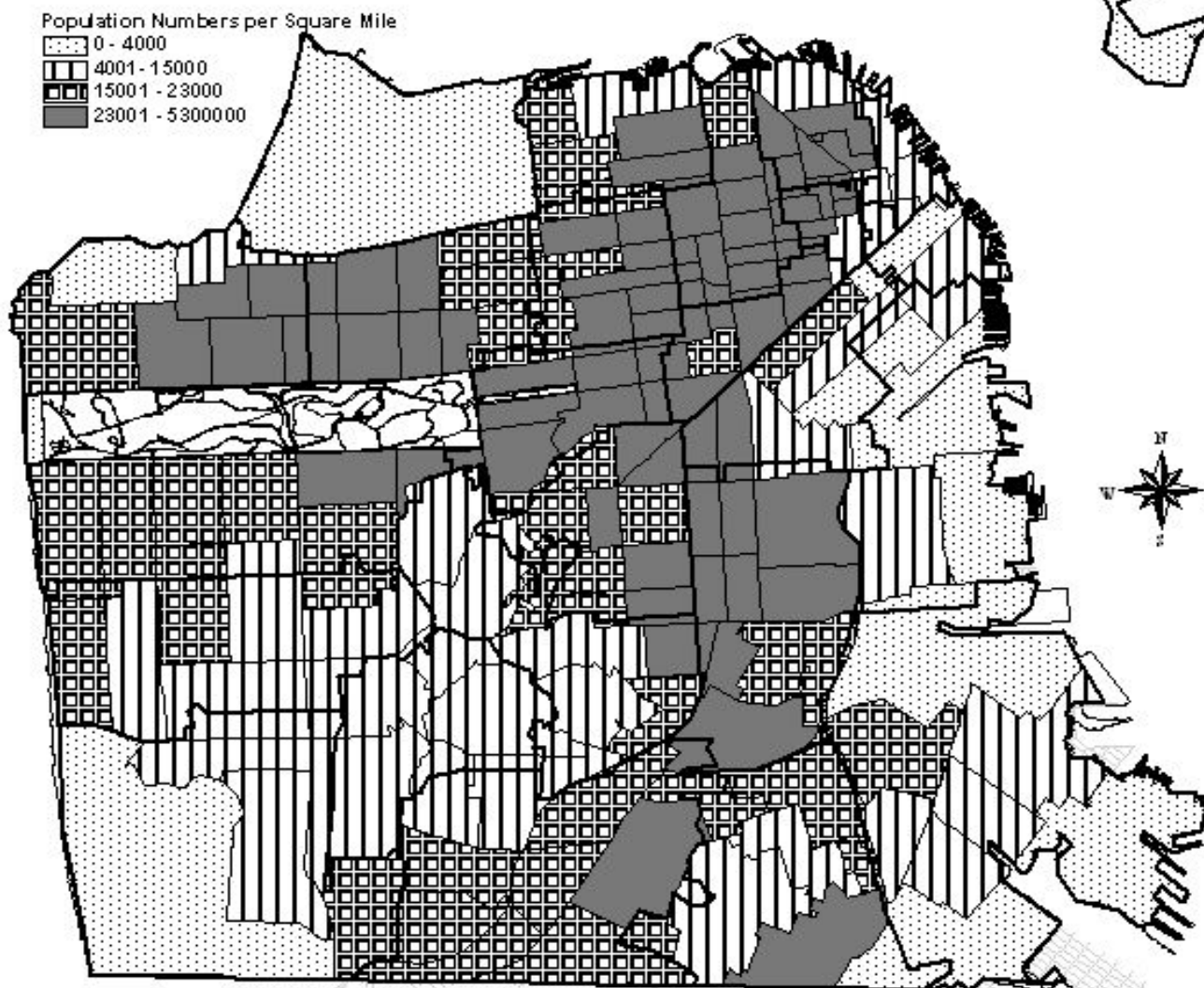
Population Numbers per Square Mile
0 - 4000
4001 - 15000
15001 - 23000
23001 - 5300000

Data Source : San Francisco Planning Department
San Francisco Department of Public Health   Population Health and Prevention   Management Information Systems
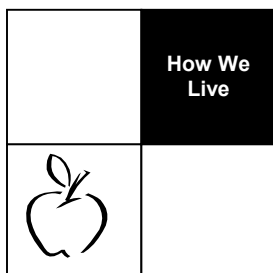
Economic Conditions

Income—continued

Income, at every level, is a powerful determinant of health (wealthier people tend to be healthier than middle-income people; the poorest tend to suffer from the worst health). This map shows the geographic distribution of per capita income in San Francisco. The poorest segments of the population (dotted on the map) are located in the eastern portions of the City.

Per Capita Income by Census Tract with Zip Code Boundaries
San Francisco, 1999

Per Capita Income
7562 - 20982
20983 - 36120
36121 - 58429
58430 - 98848

Data Source : San Francisco Planning Department
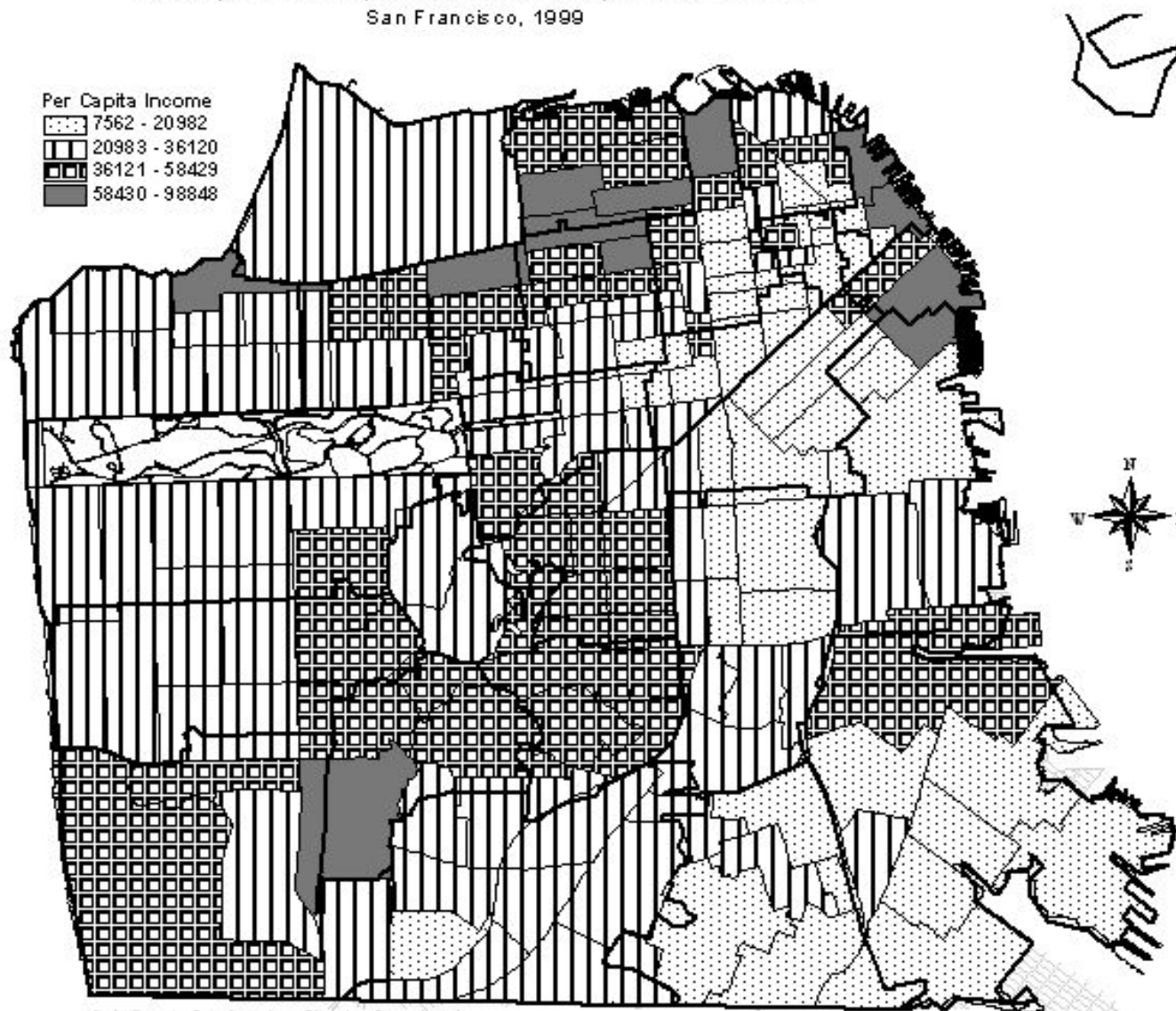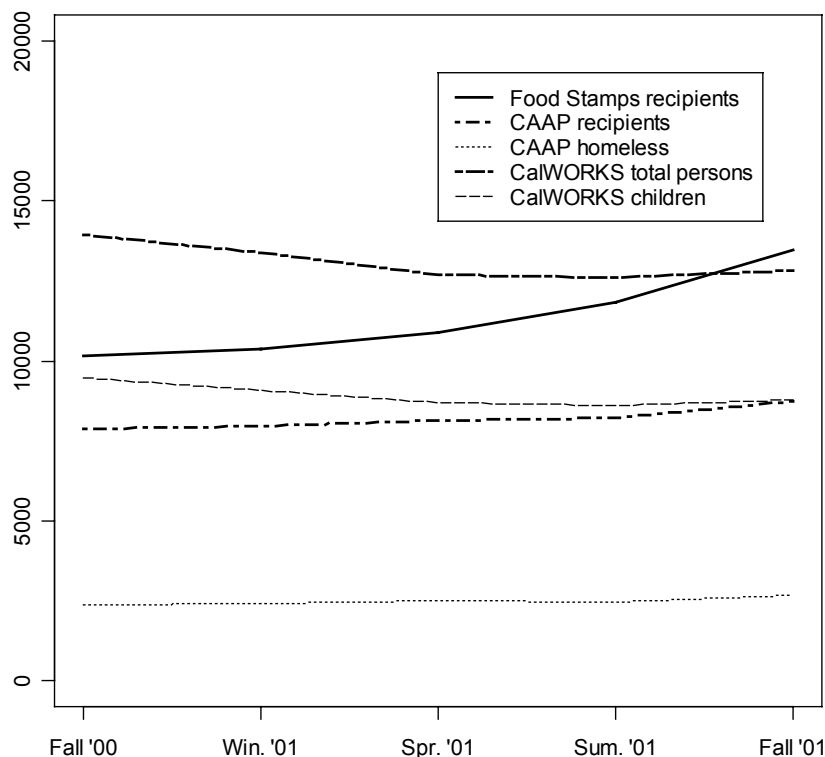San Francisco Department of Public Health   Population Health and Prevention   Management Information Systems

Economic Conditions

**San Franciscans Receiving Public Assistance,
Fall 2000-Fall 2001**

Legend:
— Food Stamps recipients
--- CAAP recipients
······ CAAP homeless
–·– CalWORKS total persons
--- CalWORKS children

X-axis: Fall '00, Win. '01, Spr. '01, Sum. '01, Fall '01
Y-axis: 0, 5000, 10000, 15000, 20000

PUBLIC ASSISTANCE

The three main benefit programs are:

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

Over the past year, as the economy declined, the number of non-assistance food stamps recipient went up by 33%; CAAP recipients increased by 11%, including a 14% rise in the number of homeless clients in the program. However, the number of CalWorks recipients, including children, declined by 8%.

Source: SFDHS Quarterly Reports (CAAP, CalWORKS,Non-Assistance Food Stamps)

How We Live
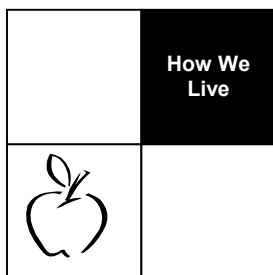
Economic Conditions

AFFORDABLE HOUSING AND HOMELESSNESS

While homelessness continues to be an important and visible problem in San Francisco, it represents the extreme end of a spectrum of problems reflecting the intersection of lack of affordable housing, incomes below minimal subsistence needs, and in some cases behavioral, mental and physical problems.

For many low income people, the next step above homelessness is the bare living conditions of SROs, single room occupancy hotels. While these often house single individuals, families also live there. This table summarizes the results of a recent survey of families living in SROs in San Francisco. It shows that more than half of the families in SROs live in Chinatown, followed by the Mission and Tenderloin. For most, English is not the preferred language. Half have full-time workers and a quarter have part-time workers. 91% cite insufficient income and 63% cite lack of affordable housing as barriers to better housing. They pay an average of 40% of their income for rent, and their average stay in this SRO is over 4 years (longer in Chinatown). A quarter are on waiting lists for low income housing. The most common health problems cited as worsened due to their housing situation are breathing/respiratory problems (68% of those responding), followed by lack of light (31%) and then sleep deprivation and children's space constraints. (the latter 3 all in Chinatown).

Characteristics of Families with Children Living in San Francisco SRO Hotels*

	SF Total No.	%	Chinatown No.	%	Mission No.	%	Tenderloin No.	%	SoMa No.	%	Other No.	%
Families residing in SROs	453	100%	279	62%	52	11%	58	13%	16	4%	48	11%
SRO hotels with families residing	158	100%	85	54%	15	9%	36	23%	**	6%	13	8%
Average rooms per family	1.1		1.1		1.2		1.0		1.1		1.1	
Average years living in this SRO	4.3		5.8		3		2		1.3		3.3	
Lived in < 1 year		32%		21%		55%		75%		89%		68%
Average members per family	3.4		3.7		3.3		3.2		2.5		3.1	
Adult caregivers	776		523		81		83		21		68	
Families w. 2+ adult caregivers	323	66%	244	87%	29	56%	25	43%	5	30%	20	42%
Children < 18	760	100%	490	64%	84	11%	91	12%	19	3%	76	10%
Ethnicity												
African American	44	10%	**	**	**	**	13	22%	12	73%	14	28%
Asian	291	64%	272	97%	**	**	**	9%	**	**	**	18%
Latino	73	18%	**	**	40	78%	18	31%	**	**	12	26%
White	20	4%	**	**	**	**	13	22%	**	**	**	10%
Caregivers' preferred language												
Cantonese	457	59%	443	85%								15%
English	117	15%	**	1%	19	23%	55	66%	18	85%	20	30%
Spanish	116	15%	**	**	62	77%	18	22%	**	**	**	52%
Toison	75	10%	70	13%	**	**	**	6%	**	**	**	**
Other	**	**	**	**	**	**	**	**	**	15%	**	**
Revenue sources & costs	776		523		81		83		21		68	
Full-time job	378	49%	273	52%	41	51%	30	36%	**	**	30	43%
Part-time job	195	25%	137	26%	22	27%	18	21%	**	**	**	26%
No income	92	12%	65	13%	**	7%	11	13%	**	**	**	13%
SSI	33	4%	12	2%	**	**	11	11%	**	33%	**	**
TANF,CalWORKS,GA,PAES,SSIP	45		**		10		24		**		**	
Average monthly income	$ 1,316		$1,524		$ 935		$1,067		$ 858		$ 1,488	
Average monthly rent	$ 523	40%	$ 392	26%	$ 515	55%	$ 724	68%	$ 1,062	124%	$ 710	48%
Average monthly food spending	$ 503	38%	$ 624	41%	$ 357	38%	$ 307	29%	$ 423	49%	$ 462	31%
Families w. relatives in other SROs	53	12%	32	12%	**	**	**	**	**	**	**	26%
On low-income housing wait list	116	26%	47	17%	13	25%	22	37%	10	60%	25	53%
Ave. years since lived in safe & stable hous	5.2		7		6.1		3.1		3.4		2.8	
Barriers to better housing												
Insufficient income	412	91%	270	97%	42	80%	53	91%	14	90%	33	68%
Lack of affordable housing	283	63%	182	65%	20	38%	48	83%	11	71%	22	46%
SROs worsened health? (no. answering)	237	52%	185	66%	16	31%	17	29%	**	**	13	26%
Breathing/respiratory problems	161	68%	147	79%	**	36%	**	30%	**	**	**	**
Lack of light	73	31%	73	40%	**	**	**	**	**	**	**	**
Sleep deprived	35	15%	35	19%	**	**	**	**	**	**	**	**
Children's space constraints	35	15%	35	19%	**	**	**	**	**	**	**	**

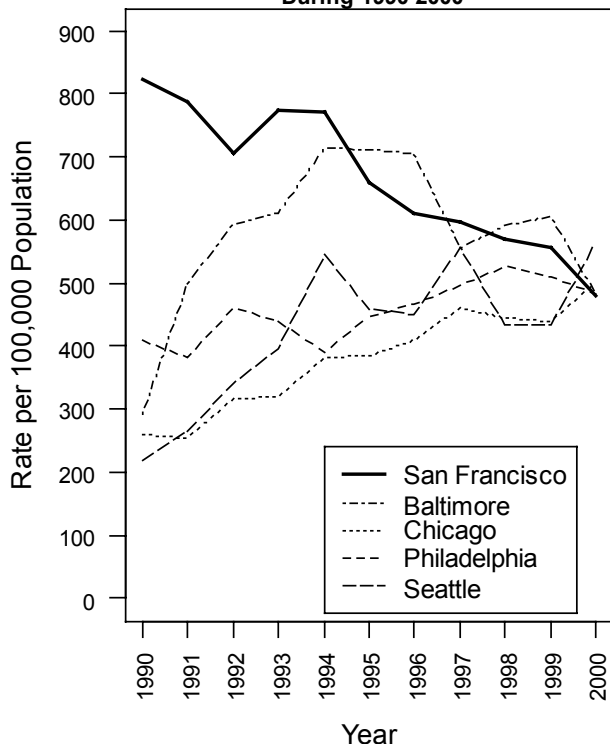* SRO: Single Room Occupancy   ** Numbers not shown for < 10 cases; %s not shown < 5 cases.

Substance Abuse

Estimated Rate of Emergency Dept. Drug Episodes for Metropolitan Areas Ranked in the Top 5 During 1990-2000

Rate per 100,000 Population

- San Francisco
- Baltimore
- Chicago
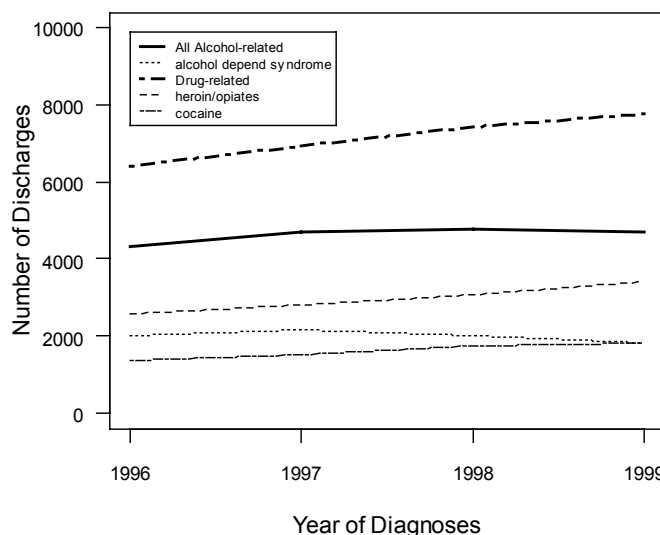- Philadelphia
- Seattle

Year

ALCOHOL AND OTHER DRUGS Among the cities ranking in the top 5 in the United States in emergency department drug episodes in the last decade, San Francisco has dropped from the highest rank, and has been the only one to have consistently declining rates. It is believed that the most recent decline is due in part to the advent of treatment on demand and t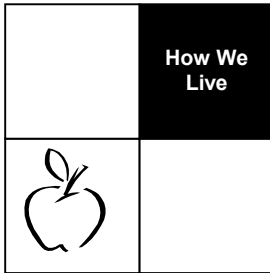he opening of the Wound Center unit at SFGH. Although death rates due to drug overdose have recently declined, they continue to pose a significant public health crisis for San Francisco.

Drug-Related Deaths, San Francisco & California, 1999-2000

Age-Adjusted Rate

San Francisco   California   U.S. HP 2010 objective
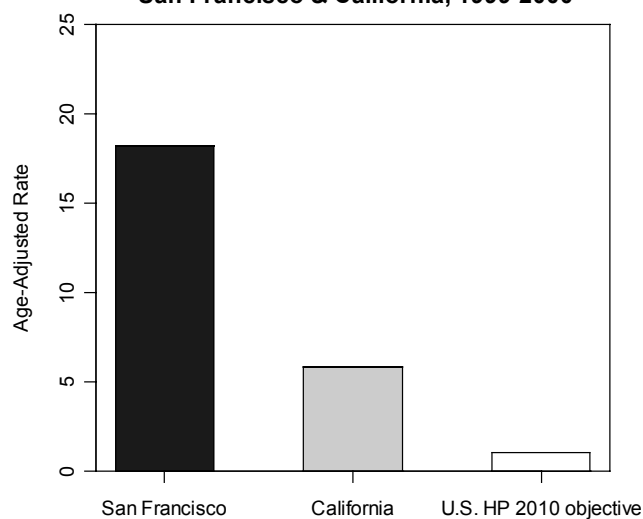
Alcohol and Drug-Related Hospitalizations, (Any Diagnosis) San Francisco, 1996-1999

Number of Discharges

- All Alcohol-related
- alcohol depend syndrome
- Drug-related
- heroin/opiates
- cocaine

Year of Diagnoses

Source: Office of Applied Studies, SAMHSA, Drug Abuse Warning System (DAWN), 200
Source: California Department of Health Services, California County Health Profiles 2002

Substance Abuse

Alcohol and Other Drugs—continued

The National Institute on Drug Abuse (NIDA) and the National Institute on Alcohol Abuse and Alcoholism (NIAA) studied the economic costs associated with alcohol and drug abuse. The study estimated that costs were $246 billion in 1992 (the most recent year for which data were available). A large part of treatment costs were for drug and alcohol related hospitalizations

As the table below documents, the use of drugs and alcohol are associated with over 12,000 hospital admissions in 1999. These include cases where the drugs or alcohol-related problem is the main cause of hospitalization (primary diagnosis of alcohol and/or drugs), and also, to many more cases where drugs and alcohol are a contributing factor in a much larger number of hospitalizations (any alcohol or drug diagnosis).

Alcohol & Drug Indicators: A. Hospitalizations

Indicator	1996	1997	1998	1999	1998-99 Change
CADDS					
Primary drug admissions					
Total admissions	13559	13452	14820	17035	15%
Number injecting	8048	7812	9060	10169	12%
Primary alcohol admissions	3464	3728	3622	4807	33%
Hospital discharges					
Alcohol related					
Total, primary diagnosis	708	893	828	1048	27%
Alcohol related, any diagnosis*	4306	4700	4757	4693	-1%
Alcohol depend syndrome	2008	2156	2009	1820	-9%
Non-depend use	637	771	910	923	1%
Alcohol liver damage	857	857	890	873	-2%
Alcohol psychoses	628	709	808	926	15%
Drug related					
Total, primary diagnosis	476	388	409	394	-4%
Drug related, any diagnosis*	6413	6941	7432	7776	5%
Heroin/opiates	2579	2820	3074	3421	11%
Cocaine	1375	1512	1727	1820	5%
Amphetamine	549	667	594	520	-12%
Cannabis	194	285	315	259	-18%
Barbiturates	70	60	93	106	14%
Total primary diagnosis alcohol & drug discharges	1184	1281	1237	1442	17%
Total discharges, any alcohol or drug diagnosis*	10719	11641	12189	12469	2%

-- % change not calculated for less than 20 events
source: Ca. Dept. of Alcohol & Drug Programs (CDADP), *Indicators of Alcohol and Drug Abuse Annual Update 2001*
website: http://www.adp.cahwnet.gov/pdf/coverpage.pdf

Substance Abuse

Alcohol and Other Drugs—continued

The NIDA /NIAAA study estimated that half of the $246 billion spent in 1992 on drug and alcohol abuse related expenses were for drug-related crime. In addition to costs, drug and alcohol abuse are responsible for a great loss life among young people. The table below shows drug and alcohol indicators that relate to law enforcement such as alcohol-involved accidents, license suspensions, and arrests. The table does not include non-alcohol and drug crimes such as robberies that are often influenced by the use and/or need for drugs and alcohol.

Alcohol was involved in 27.1% of all fatal accidents in 1999, down 11% from the previous year. The total number of license suspensions/revocations declined 13% between 1998 and 1999. Alcohol and drug related arrests also declined in 1999. Adult alcohol felony arrests were down 20%, juvenile alcohol-related arrests were down 17% and juvenile drug-related arrests were down 19% from the previous year.

Alcohol & Drug Indicators: B. Law Enforcement

Indicator	Year 1996	1997	1998	1999	1998-99 Change
CHP MV traffic indicators					
Alcohol-involved accidents--Total	460	385	430	417	-3%
Fatal accidents	13	10	18	13	--
% of all fatal accidents	27.7	18.5	30.5	27.1	-11%
Injury accidents	447	375	412	404	-2%
% of all injury accidents	8.5	8.0	8.1	8.4	4%
Persons in alcohol-involved accidents--Total	704	599	651	640	-2%
Fatal	14	10	18	13	--
% of persons killed in all fatal accidents	27.5	18.2	30	27.1	-10%
Injuries	690	589	633	627	-1%
% of persons injured in all injury accidents	8.8	8.4	8.4	8.8	5%
DUI/Primary collision factor	236	221	216	222	3%
Fatal accidents	8	10	7	8	--
% of all fatal accidents	17.0	18.5	11.9	16.7	40%
Injury accidents	228	211	209	214	2%
% of all injury accidents	4.3	4.5	4.1	4.4	--
DMV					
Driver lic. suspensions/revocations--Total	588	423	712	620	-13%
1st or 2d felony	17	9	24	17	-29%
1st or 2d misdemeanor	300	206	388	284	-27%
3d or 4th offense	271	208	300	319	6%
	588	423	712	620	-13%
Criminal justice					
Adult drug-related arrests	8443	9280	10941	10682	-2%
Felony	8206	8192	8920	8628	-3%
Misdemeanor	237	1088	2021	2054	2%
Adult alcohol-related arrests	3624	3794	4969	4919	-1%
Felony	125	124	134	107	-20%
Misdemeanor	3499	3670	4835	4812	0%
Juvenile drug-related arrests	688	653	627	506	-19%
Juvenile alcohol-related arrests	39	45	54	45	-17%
Drug commitments					
Ca. Rehab. Ctr.	8	4	5	2	--
Dept. of Corrections	304	178	180	159	-12%
CYA	10	2	3	6	--

-- % change not calculated for less than 20 events

source: Ca. Dept. of Alcohol & Drug Programs (CDADP), *Indicators of Alcohol and Drug Abuse Annual Update 2001*
website: http://www.adp.cahwnet.gov/pdf/coverpage.pdf
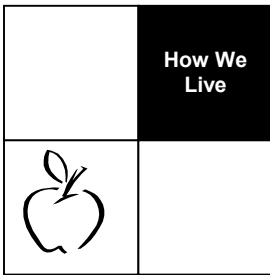
Smoking

SMOKING

According to the Surgeon General "Cigarette smoking is the leading preventable cause of disease and death in the United States." Although the rates of smoking in California are lower than the national average, smoking is still one of the major contributing factor in California's disease and death rates.

Tobacco use varies among ethnic groups, age groups, between the sexes, and among income and educational levels. In California, men smoke about a quarter as much as women. African Americans have the highest rates of smoking followed by Whites. Individuals with less income (under $26K) are more likely to smoke than those with incomes over $50K. Education and age seem to have the greatest impact on smoking behavior with college graduates smoking less than half as much as those without an advanced degree. Individuals over the age of 65 are the least likely to be smokers, partly because many smokers will have died before reacing oldest age groups.
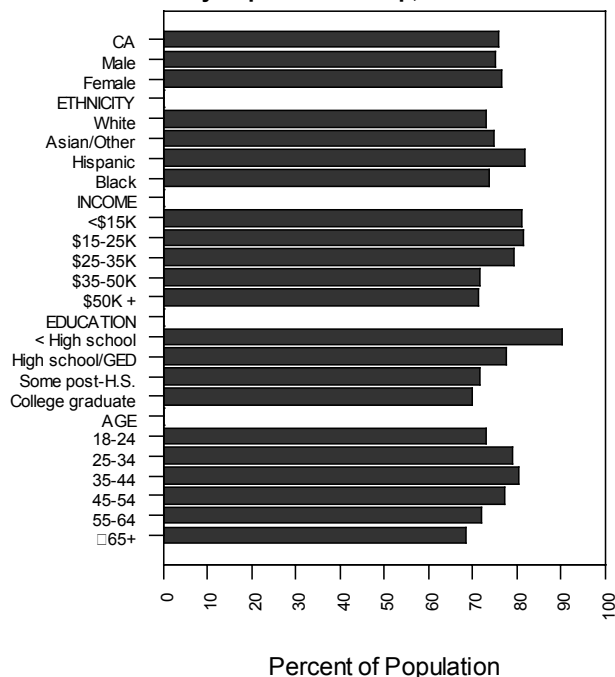
Current Smoking by Population Group, California 2000

Percent of Population
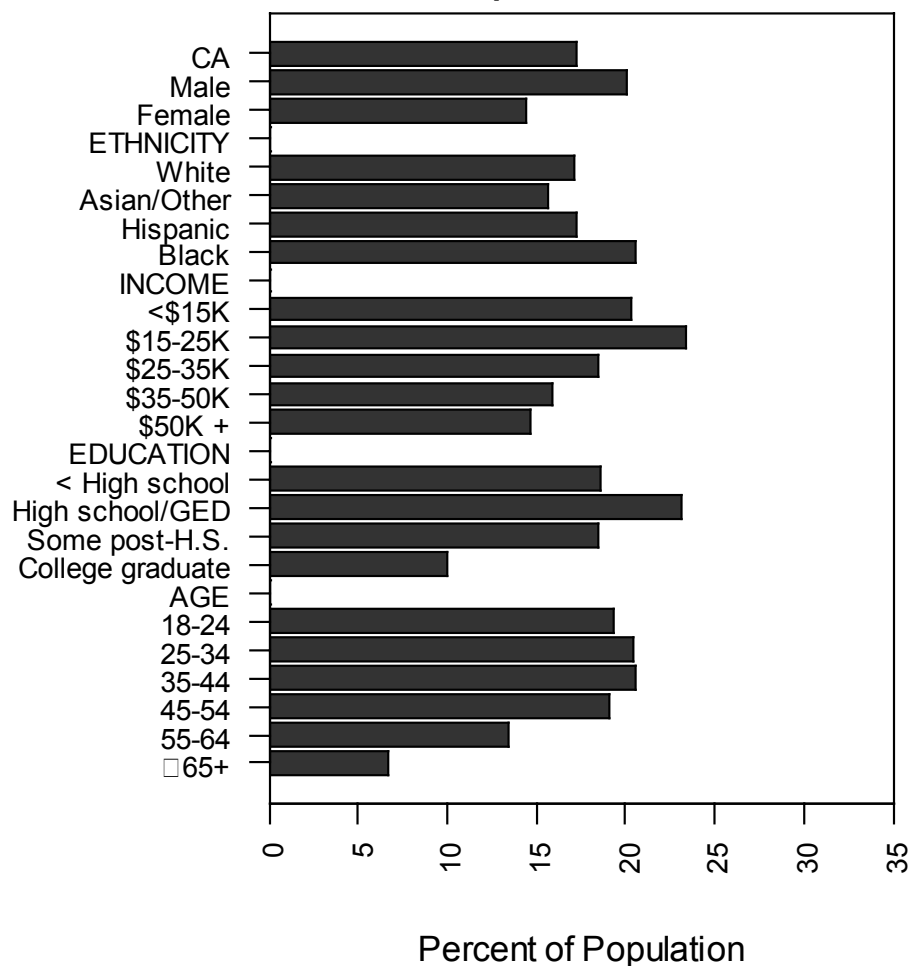
Physical Inactivity

At Health Risk Due to Physical Inactivity by Population Group, California 2000


Percent of Population

PHYSICAL INACTIVITY

After tobacco exposure, physical inactivity is now considered the second leading determinant of death in the U.S. A recent Surgeon General's report on physical inactivity states that people who are inactive can improve their health and reduce their risk of developing or dying from heart disease, diabetes, high blood pressure, and colon cancer by becoming even moderately active on a regular basis.

In California, there are substantial differences between ethnic groups in degree of physical activity. Whites have the highest level of physical activity among ethnic groups and Hispanics the lowest. Income level correlates positively with activity level, as income increases, so do physical activity levels. Individuals making the most money ($50K+) have the highest levels of activity. Education has a similar impact on activity levels. College graduates have the highest level of activity and those with no high school the least.
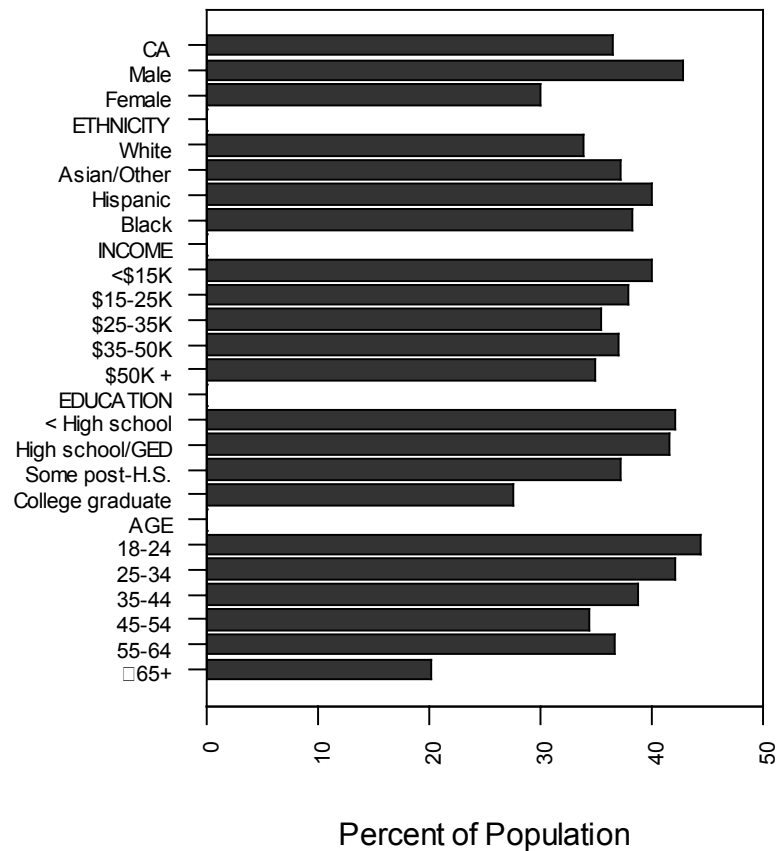
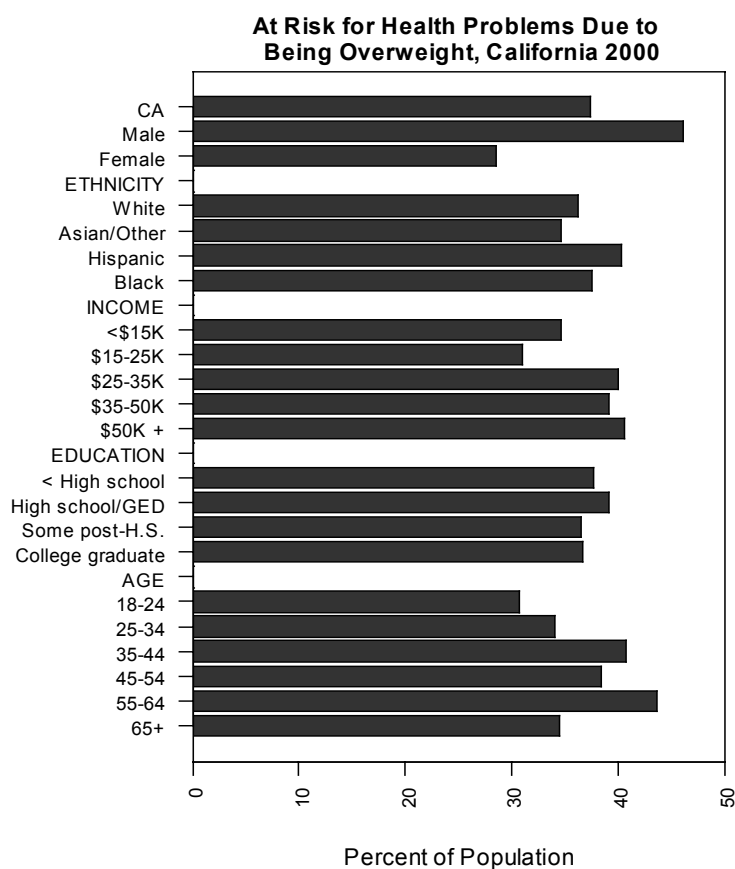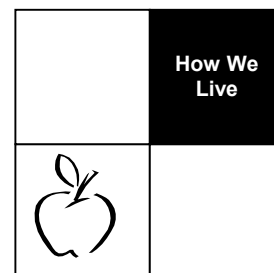**Physical Activity by Population Group, California 2000**

Percent of Population
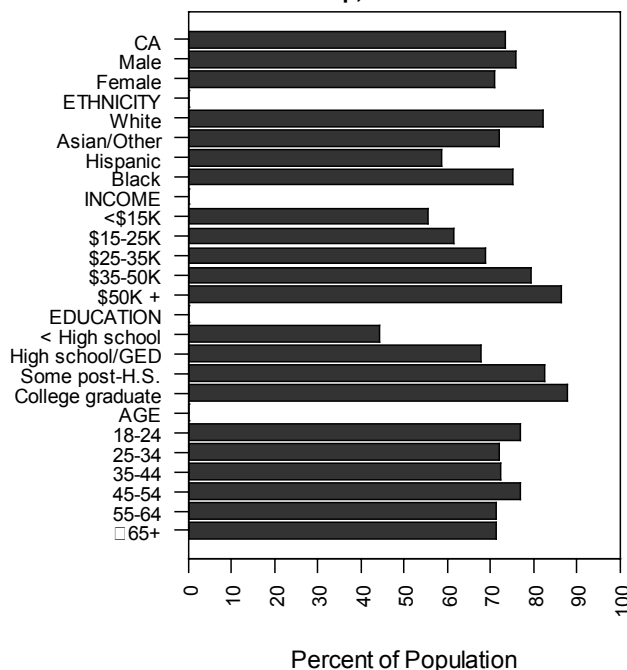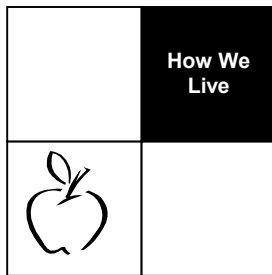
Nutrition

**Eat Fruits or Vegetables Less than 3 Times a Day
by Population Group, California 2000**

| Population Group	Percent
CA	
Male	
Female	
ETHNICITY	
White	
Asian/Other	
Hispanic	
Black	
INCOME	
<$15K	
$15-25K	
$25-35K	
$35-50K	
$50K +	
EDUCATION	
< High school	
High school/GED	
Some post-H.S.	
College graduate	
AGE	
18-24	
25-34	
35-44	
45-54	
55-64	
65+	

Percent of Population

NUTRITION

Healthy People 2010 provides specific objectives for the consumption of fruits (75% of the population should consume fruit at least twice a day) and vegetables (50% of the population should consume at least three daily servings of vegetables, with at least one-third being dark green or orange vegetables). This graph for California shows the need for improvement across different demographic groups, especially for males, younger people, and those with less education.

Overweight

At Risk for Health Problems Due to Being Overweight, California 2000

CA	
Male	
Female	
ETHNICITY	
White	
Asian/Other	
Hispanic	
Black	
INCOME	
<$15K	
$15-25K	
$25-35K	
$35-50K	
$50K +	
EDUCATION	
< High school	
High school/GED	
Some post-H.S.	
College graduate	
AGE	
18-24	
25-34	
35-44	
45-54	
55-64	
65+	

Percent of Population

OVERWEIGHT

Being overweight increases the risk of hypertension, diabetes, high cholesterol, heart disease, arthritis, breast cancer, and other health problems. *Healthy People 2010* considers overweight to be a leading health indicator. Nationally, overweight is increasing rather than decreasing. If this major health problem is to be addressed in San Francisco, we will need to find ways to increase the opportunities for physical activity in the population, in addition to assuring easy access to healthy food in all areas of the City. People at any weight level can reduce their health risks by regular physical activity.
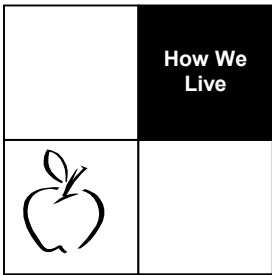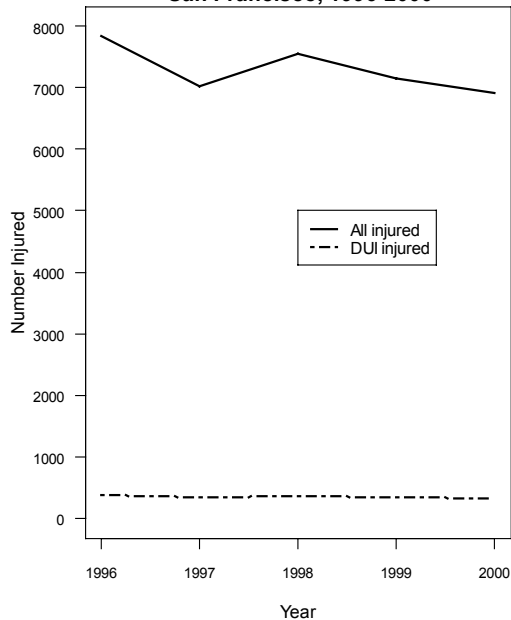
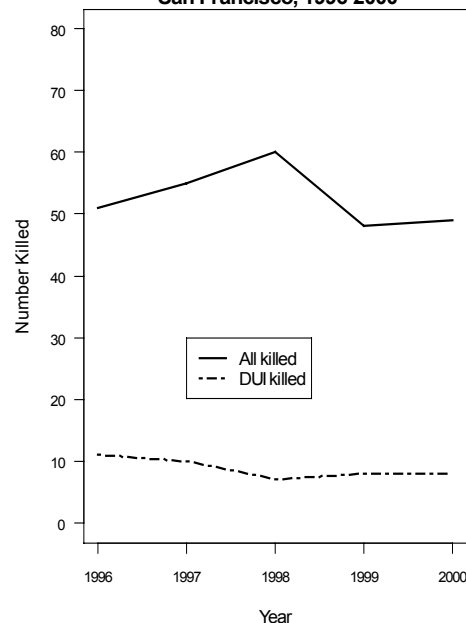# Injuries

UNINTENTIONAL INJURIES

The number of people killed and injured in motor vehicle accidents has remained fairly level over the five years through 2000, as has the contribution of driving under the influence (DUI) to these injuries. DUI continues to be a much larger contributor to more severe accidents, involving fatalities, than to non-fatal injury accidents.

These figures cover all injuries involving motor vehicles. In 2000, 33 of the 49 people killed in San Francisco in motor vehicle accidents were pedestrians.

Persons Injured in Motor Vehicle Accidents, San Francisco, 1996-2000

Number Injured

- All injured
- DUI injured

Year

Persons Killed in Motor Vehicle Accidents, San Francisco, 1996-2000

Number Killed

- All killed
- DUI killed

Year

Source: California Highway Patrol

Injuries

Mechanism of Injury Death for
San Francisco Residents and Deaths in SF,1998

Legend:
- ■ SF resident, die SF (n=407)
- ▨ Non-SF res., die SF(n=129)
- □ SF res., die elsewhere(n=35)

Y-axis: Percent of Deaths (0 to 60)

Categories: Drug/poison, Motor veh. Traffic, Firearms, Falls, Other

Mechanism of Injury Hospitalization for
San Francisco Residents and Treatment in SF,1998

Legend:
- ■ SF resident,treated SF (n=5585)
- ▨ Non-SF res.,treated SF (n=2352)
- □ SF res., treated elsewhere (n=597)

Y-axis: Percent of Deaths (0 to 60)

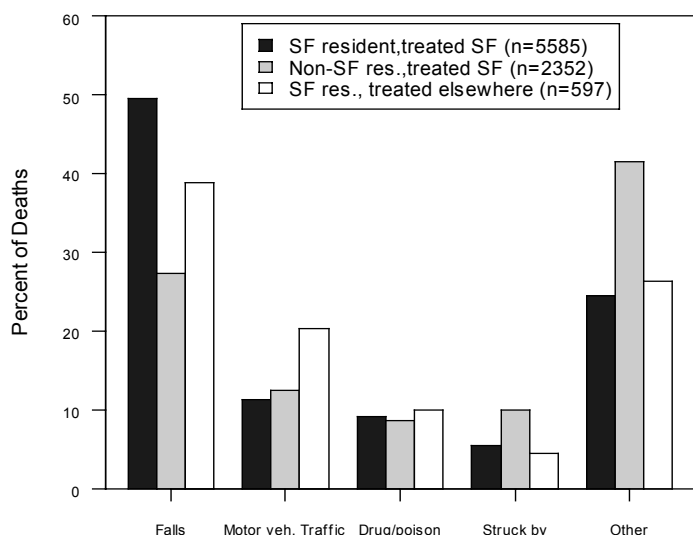Categories: Falls, Motor veh. Traffic, Drug/poison, Struck by, Other
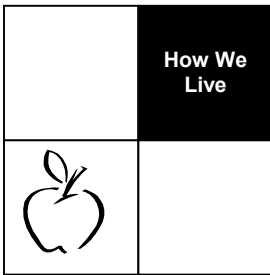
**Unintentional Injuries—
continued**

Hundreds of thousands of non-San Francisco residents spend time in the City each day, as workers or visitors to its stores, services, and tourist attractions. These people are subject to being injured or killed here, as San Francisco residents are when they travel elsewhere. These figures show the proportional distribution of mechanisms of injuries causing death or hospitalization for San Francisco residents here or elsewhere and for non-residents occurring here. Drug poisoning is the leading mechanism of injury death for SF residents and non-residents dying here, while falls is the leading mechanism for both residents and non-residents hospitalized here.
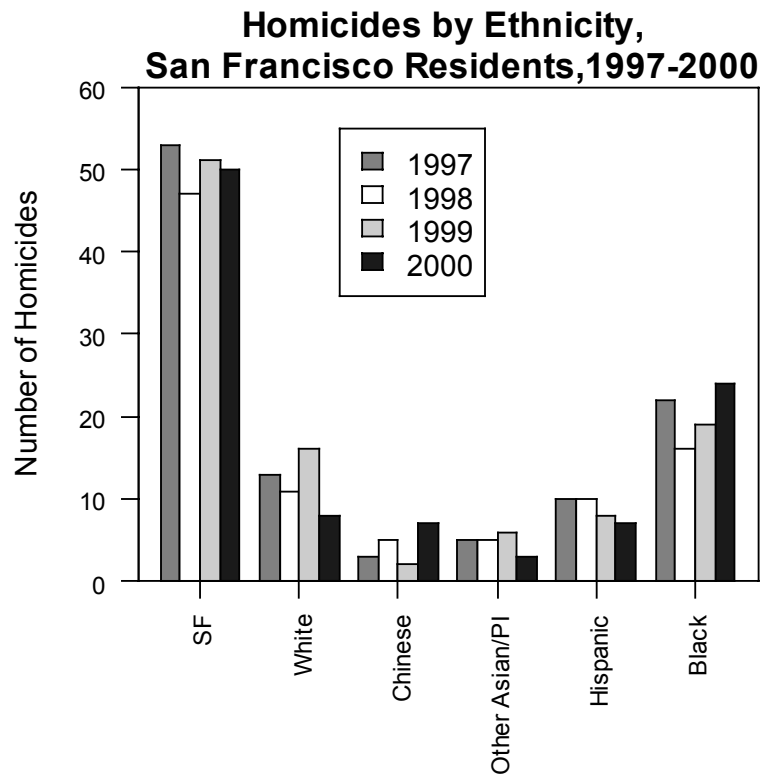
Injuries

VIOLENCE AND INTENTIONAL INJURIES

These data show the geographic distribution of 1998 assaults and the numbers of San Francisco residents, by ethnicity, who were homicide victims from 1997 through 2000.
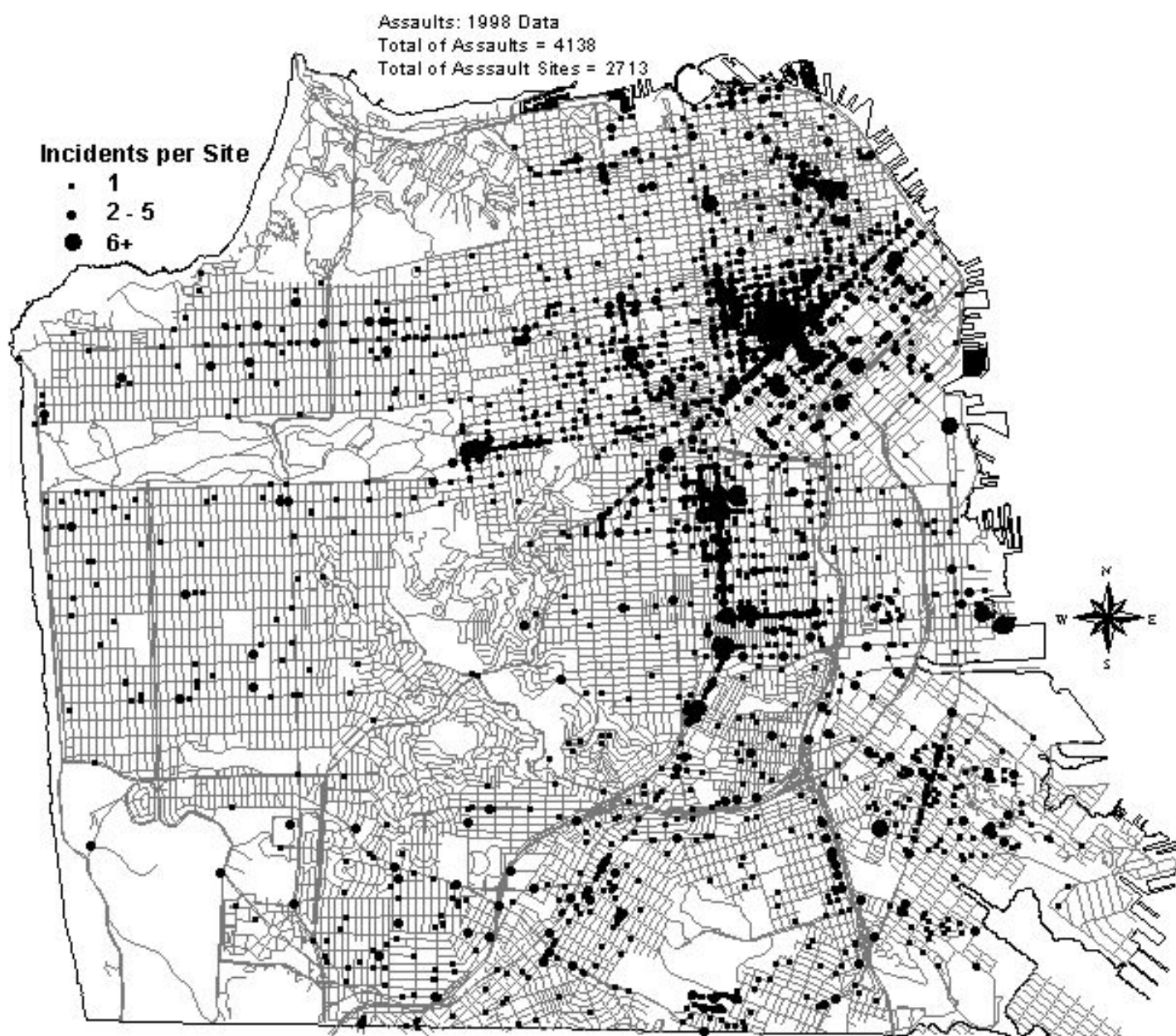
The total number of homicides has hovered around 50 over this period. The numbers are too small to calculate reliable rates, but African Americans represent the smallest population of any of the ethnicities shown, yet have the largest number of homicide victims for each year. The number of Hispanic homicide victims is less striking but also disproportionately great compared to their share of San Francisco's population.

The assault map shows the heaviest concentration along the Market and Mission St. corridors and in the Tenderloin, with other concentrations including Haight near Golden Gate Park, North Beach, and along and around 3d in Bayview Hunters Point. The areas of densest concentration on this map are within areas of highest residential density and lower income shown in earlier maps.
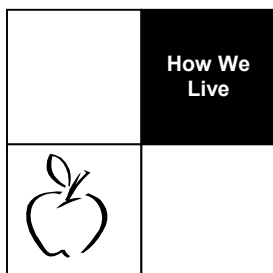
Homicides by Ethnicity, San Francisco Residents,1997-2000

Injuries

Assaults: 1998 Data
Total of Assaults = 4138
Total of Asssault Sites = 2713

Incidents per Site
- 1
- 2 - 5
- 6+

Data Source: San Francisco Fire Department EMS Division, 1998 Paramedic Data
San Francisco Department of Public Health Population Health and Prevention Management Information Systems

Environmental Health

AIR QUALITY

There are many aspects of the physical and social environment that impact people's health and well-being. An aspect of the physical environment for which we have monitoring data is air quality. The federal Clean Air Act directs the Environmental Protection Agency (EPA) to implement health based standards for certain air pollutants, including ozone, nitrogen oxide, and particulate matter (PM10). The ozone and nitrogen oxide standards were not exceeded over the last 3 years, but particulates exceeded the state standard (which is stricter than the federal standard) on 17 days over the 3 years (compared to 6 days exceeded in the previous 4 years). Particulate matter can make asthma and other respiratory problems worse. Major sources of particulates in the Bay Area include industrial emissions, motor vehicles, road dust, construction, demolition, and residential wood smoke.
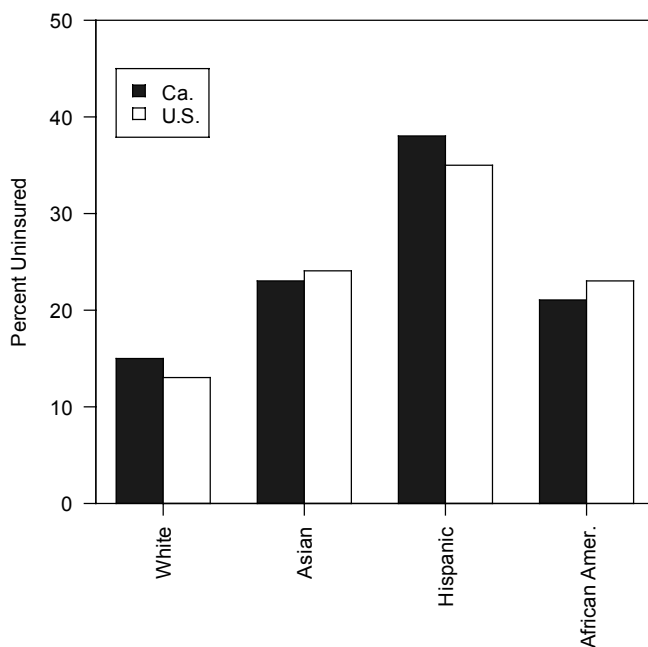
San Francisco Air Quality Monitoring Data, 1999-2001

Measure	Standard	1999 Date	1999 No.	2000 Date	2000 No.	2001 Date	2001 No.
OZONE							
Maximum Hourly							
Days > state standard	.09 ppm*		0		0		0
Days > national standard	.12 ppm*		0		0		0
Highest 4 days measured	High	30-Sep	0.079	14-Jun	0.058	7-May	0.061
	2d high	10-Oct	0.070	17-Sep	0.055	30-May	0.061
	3d high	23-Oct	0.063	2-Apr	0.051	31-May	0.059
	4th high	26-Sep	0.061	1-Apr	0.049	11-Apr	0.051
Year's coverage			97		99		75
*(Days with 1 measurement greater than the state (0.09 parts per million) or national (0.12 ppm) standard)							
Daily 8-Hour Averages							
Days > national standard	.08 ppm		0		0		0
Highest 4 days measured	High	22-Oct	0.057	22-Apr	0.043	1-Apr	0.047
	2d high	30-Sep	0.056	2-Apr	0.042	10-Apr	0.047
	3d high	23-Oct	0.056	2-May	0.042	30-May	0.047
	4th high	5-Nov	0.050	27-Feb	0.041	15-Apr	0.046
Year's coverage			97		99		75
*(Days w. 1 8-hour period greater than the national 8-hour standard of 0.08 parts per million)							
NITROGEN OXIDE							
Days > state standard	.25 ppm*		0		0		0
Annual average			0.021		0.020		
Highest 4 days measured	High	30-Sep	0.103	19-Sep	0.074	20-Jun	0.073
	2d high	28-Sep	0.082	7-Dec	0.069	7-May	0.061
	3d high	20-Oct	0.082	12-Sep	0.069	5-Jan	0.059
	4th high	28-Dec	0.077	14-Jun	0.069	8-May	0.059
Year's coverage			97		99		32
* (Days w. 1 measurement greater than the state hourly standard of 0.25 parts per million)							
PARTICULATES (PM10)							
State standard	50 mcm*						
Days > standard (measured)**			6		2		5
Days > standard (calculated)**			36		12		24
Annual average			22.6		21.6		25.8
National standard	150 mcm*						
Days > standard (measured)			0		0		0
Days > standard (calculated)			0		0		0
Annual average			26.4		24		28.9
Highest 4 days measured	High	21-Oct	77.9	20-Dec	63.2	7-Jan	64.6
	2d high	26-Dec	69.4	7-Jan	53	18-Jun	56.4
	3d high	29-Jun	67.6	16-Aug	46.3	7-May	55.4
	4th high	15-Oct	59.8	8-Dec	43.9	1-Jan	54.8
Year's coverage			100		99		39

*(Days with a measurement greater than the standard, in micrograms per cubic centimenter (mcm). State and national averages differ because state calculates a geometric mean, and national uses arithmetic mean

** (Measured days are those with actual measurements exceeding standards. Measurements typically collected every 6 days. Calculated days are expected number had measurements been taken daily.)

Year's coverage shows percent of days with expected high pollutants that were actually monitored.
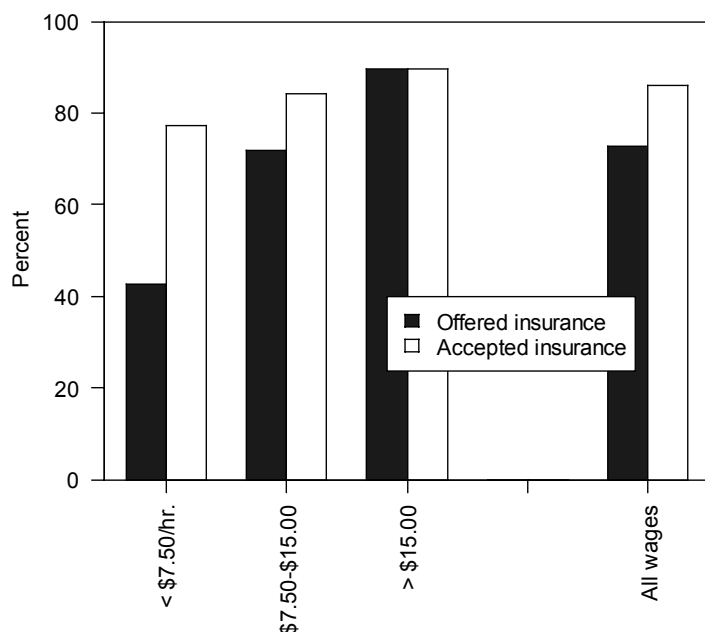
Access to Health Care

Percent Uninsured by Ethnicity,
California and US, 1997-1999

Legend: ■ Ca. □ U.S.

Y-axis: Percent Uninsured (0 to 50)

X-axis categories: White, Asian, Hispanic, African Amer.

Percent of Workers Offered and Accepting,
Health Insurance by Wage Level, California, 1999

Y-axis: Percent (0 to 100)

Legend: ■ Offered insurance □ Accepted insurance

X-axis categories: < $7.50/hr., $7.50-$15.00, > $15.00, All wages

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.

Generally in California, as in the rest of the US, whites have the lowest percent uninsured, African Americans and Asians have higher percents, and Hispanics have the highest percentage uninsured.

As the lower figure shows, lower income workers in California are much less likely to have insurance offered as a benefit through their employer. When it is offered, lower wage workers are also slightly less likely to accept it, probably due to the difficulty of affording co-payments. In San Francisco, those who are uninsured are likely to use the public health system which is available to them.
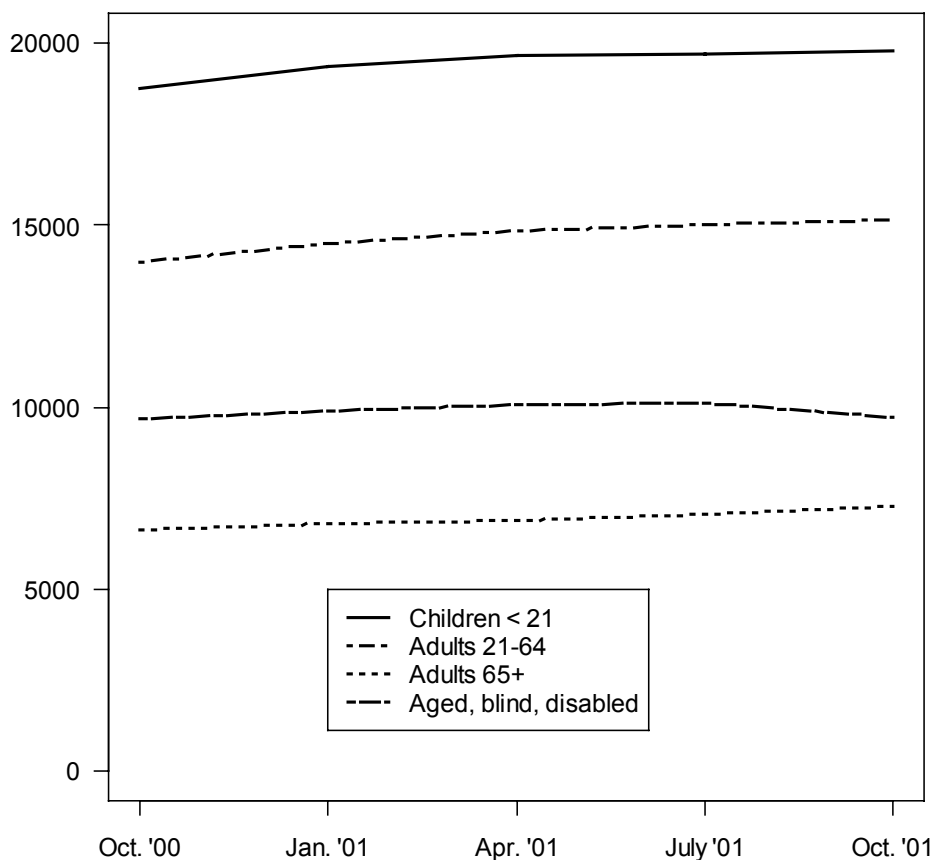
How We Live
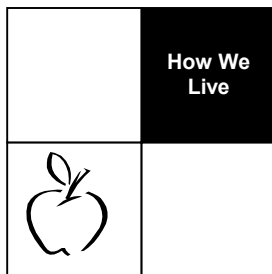
Access to Health Care

MEDI-CAL

Although they are the smallest part of San Francisco's population (see "Who We Are"), children make up the largest proportion (by age) of the Medi-Cal population, here and throughout California. The program's eligibility rules have been developed over time to include a larger share of low-income children, but not adults. Because of Medi-Cal for children and Medicare for those over 65, non-elderly adults – a larger share of San Francisco's population than that of the rest of the state – generally have the highest uninsured rates.

Over the year from October 2000 to October 2001, San Francisco enrollees of all ages increased: children under age 21 by 5.5%, adults 21-64 by 8%, and adults over 65 by 10%.

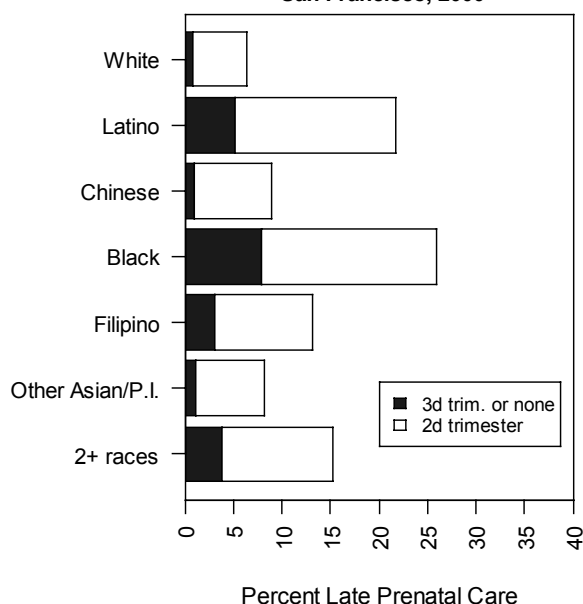**San Franciscans Enrolled in Medi-Cal by Age and Condition, Oct. 2000-2001**

Legend:
— Children < 21
-·- Adults 21-64
···· Adults 65+
-··- Aged, blind, disabled

Access to Health Care

**Late Prenatal Care by Mother's Ethnicity,
San Francisco, 2000**

- 3d trim. or none
- □ 2d trimester

Percent Late Prenatal Care

**Percent Up-to-Date on Immunizations at Age 2 by
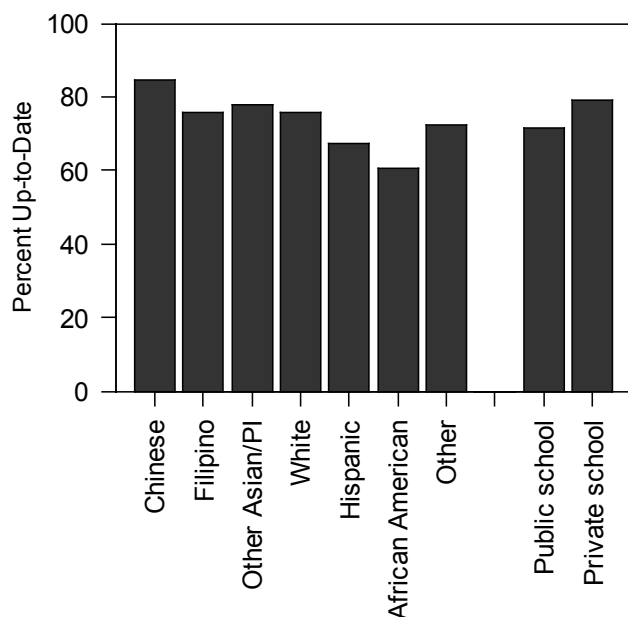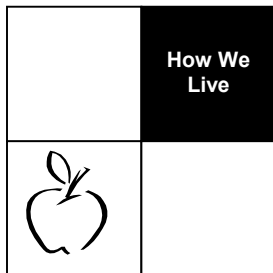Ethnicity and School Type, San Francisco, 1999**

PRENTAL CARE
Pregnant women should begin prenatal care in the first trimester; later entry into care is generally associated with worse perinatal and infant health outcomes. African American women continue to have the lowest percentages of early prenatal care, although the 2000 percentages of late care are somewhat lower than those for 1999 for African American, Hispanic, and Filipino women—the three ethnicities with the highest 1999 late prenatal care percentages.

IMMUNIZATIONS
The last expanded Kindergarten retrospective study of up-to-date immunizations for which data are now available, done in 1999, provide the results shown here. Data are only shown for groups with more than 100 children's records reviewed. Chinese children did slightly better and African American children slightly worse in terms of percents immunized. Percentages with up-to-date immunizations in 1999 in San Francisco were better than California levels, and also had improved over the 1996 survey, Citywide and for Hispanic and African American children.

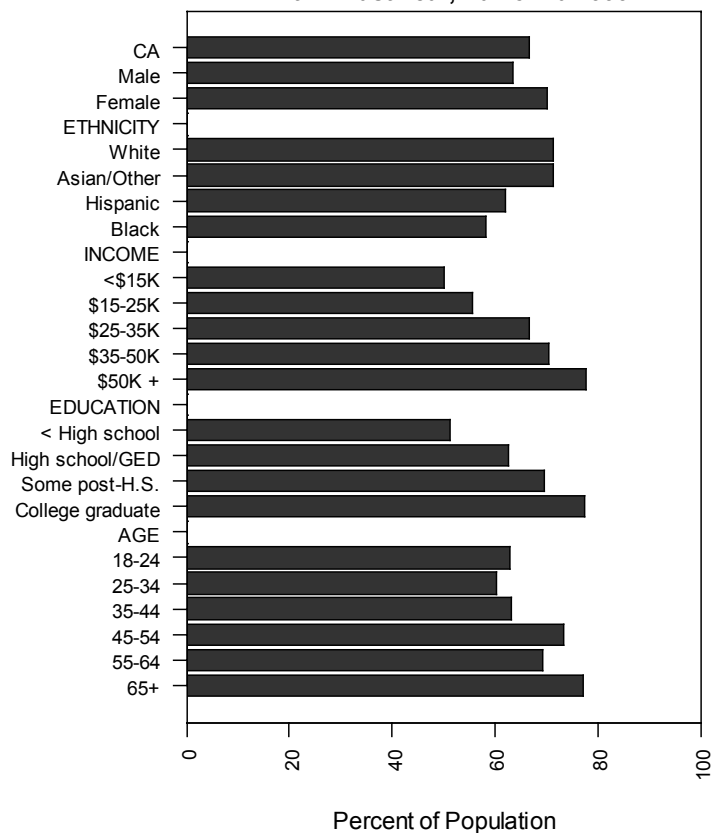Source: San Francisco Department of Public Health

Access to Health Care

DENTAL CARE

Access to dental care is important for good oral health, including screening for mouth and tongue cancer, and is also considered an indicator of general access to health care. In the absence of local data, these California data indicate an across the board need for increased access to and/or use of preventive dental services. There are disparities in such use, with the need greater the lower the income, education and age category,. and among African Americans and Hispanics.
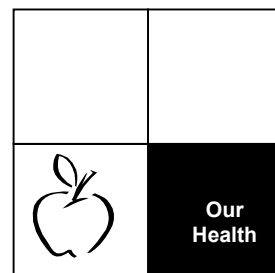
Had Teeth Cleaned by Dentist or Hygienist Within Past Year, California 1999

Category	
CA	
Male	
Female	
ETHNICITY	
White	
Asian/Other	
Hispanic	
Black	
INCOME	
<$15K	
$15-25K	
$25-35K	
$35-50K	
$50K +	
EDUCATION	
< High school	
High school/GED	
Some post-H.S.	
College graduate	
AGE	
18-24	
25-34	
35-44	
45-54	
55-64	
65+	

Percent of Population

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.
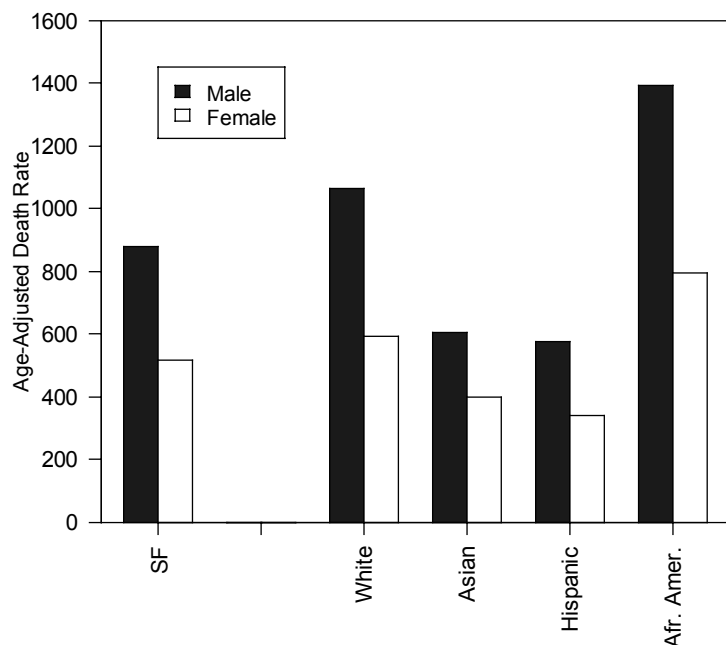
Burden of Disease

**Life Expectancy at Birth
by Sex and Ethnicity, San Francisco, 1999**
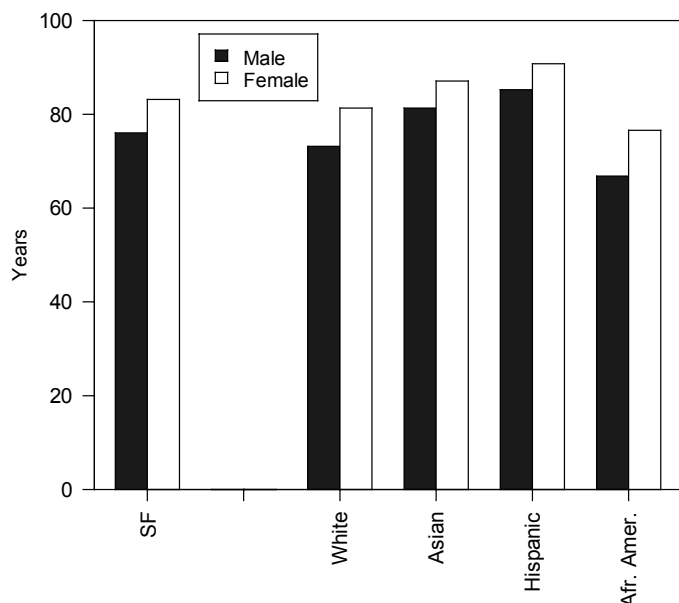
**Age-Adjusted Death Rates by Sex and
Major Ethnicity Group, San Francisco,2000**

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.
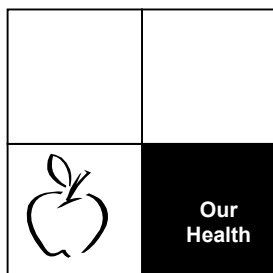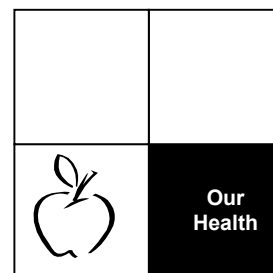
Burden of Disease

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.)	DEATH RATE	95% CONF. LIMITS (LOWER, UPPER)	CA DEATH RATE	SF/ CA	US 2010 Objective	SF Met?
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 S
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 lover 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.
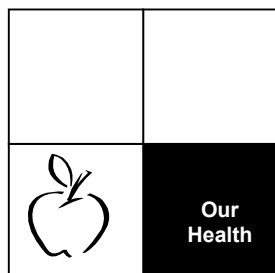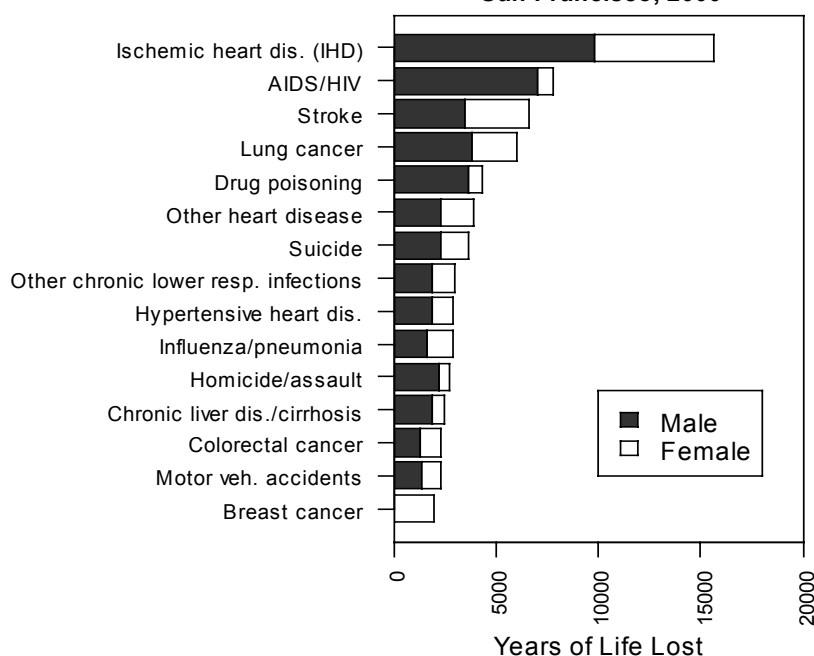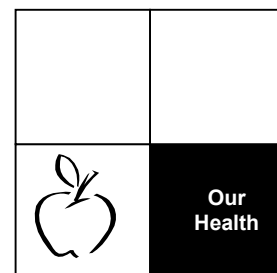
Burden of Disease

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 15th cause, breast cancer.

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

Ischemic heart dis. (IHD)
AIDS/HIV
Stroke
Lung cancer
Drug poisoning
Other heart disease
Suicide
Other chronic lower resp. infections
Hypertensive heart dis.
Influenza/pneumonia
Homicide/assault
Chronic liver dis./cirrhosis
Colorectal cancer
Motor veh. accidents
Breast cancer

■ Male
□ Female

0   5000   10000   15000   20000

Years of Life Lost
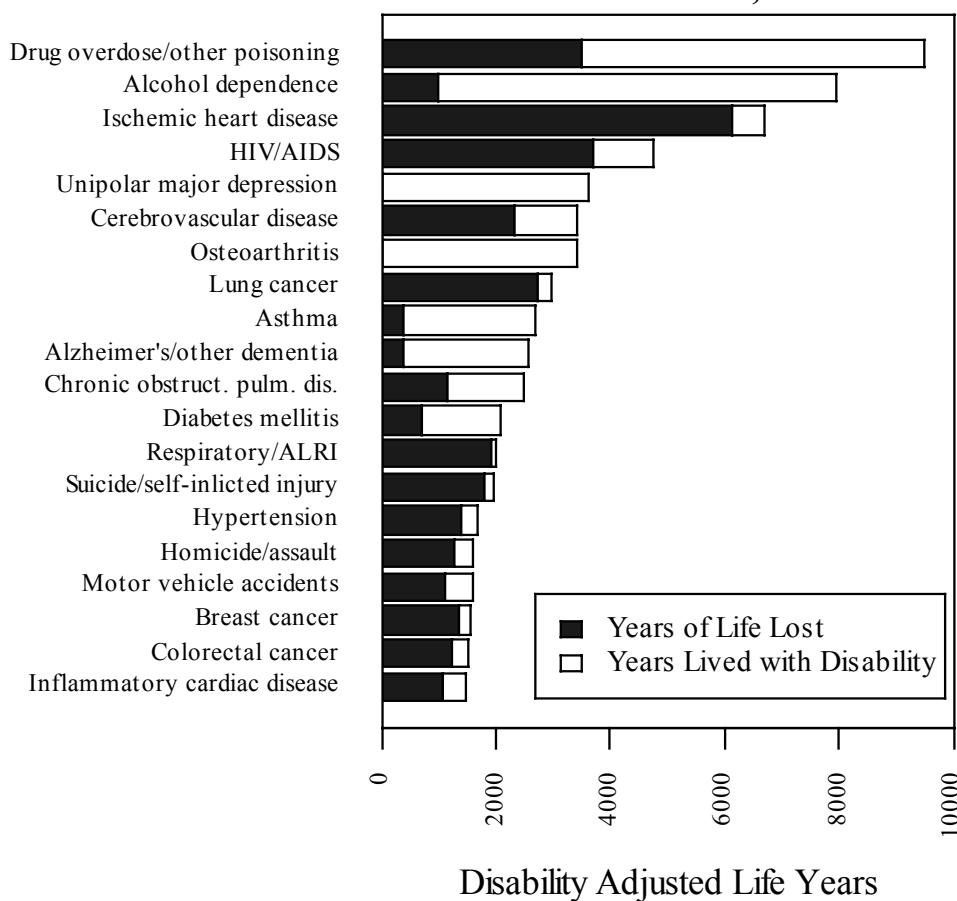
Burden of Disease

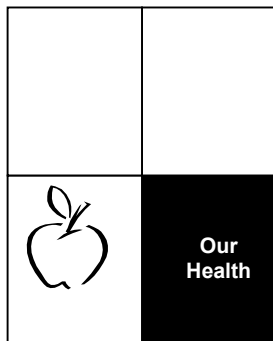**DISABILITY ADJUSTED LIFE YEARS**

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

Drug overdose/other poisoning
Alcohol dependence
Ischemic heart disease
HIV/AIDS
Unipolar major depression
Cerebrovascular disease
Osteoarthritis
Lung cancer
Asthma
Alzheimer's/other dementia
Chronic obstruct. pulm. dis.
Diabetes mellitis
Respiratory/ALRI
Suicide/self-inlicted injury
Hypertension
Homicide/assault
Motor vehicle accidents
Breast cancer
Colorectal cancer
Inflammatory cardiac disease

■ Years of Life Lost
□ Years Lived with Disability

0   2000   4000   6000   8000   10000

Disability Adjusted Life Years

Burden of Disease

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

	Number	No. w. Disability	w/o Disability	% w. Disability
Male:	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%
Female:	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%
Total	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.
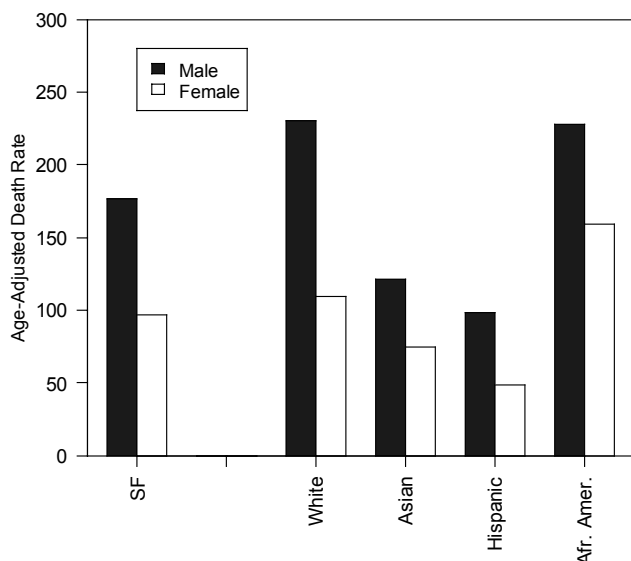
These estimates are self-reported in the American Community Survey, and can be expected to differ from figures from programs such as SSI, which are based on examinations and program-specified disability criteria.
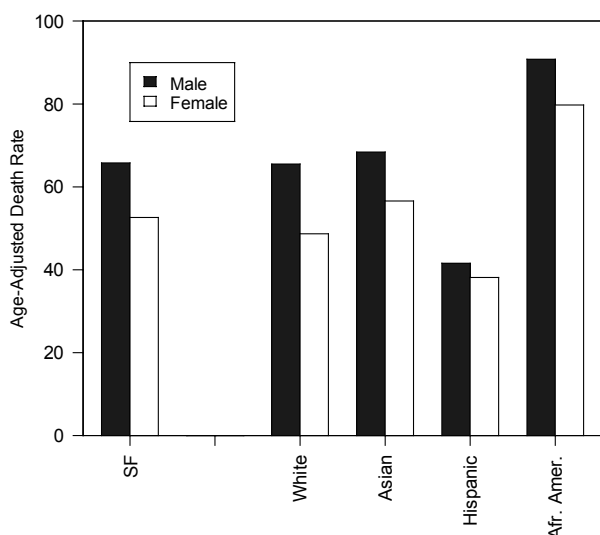
Non-Communicable Disease

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.
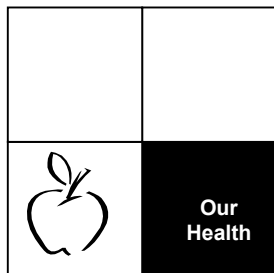
Ischemic heart disease (IHD, also called coronary heart disease) is the leading contributor of years of life lost for both men and women, and the leading cause of death in terms of both rates and numbers of deaths. San Francisco's rate for 1999-2000 combined was 159.2, compared to California's rate of 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.
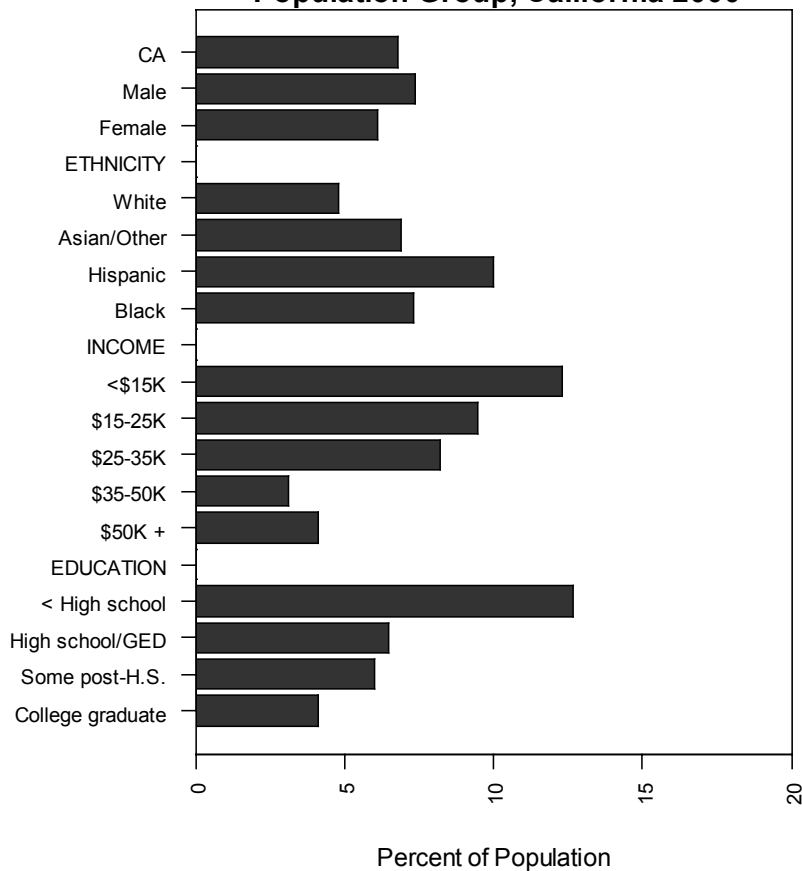
Non-Communicable Disease

Estimated Diabetes Mellitis Prevalence by Population Group, California 2000

Percent of Population

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.

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.

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.	
	MALE											
	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	
	FEMALE											
	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 (*in situ*)	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
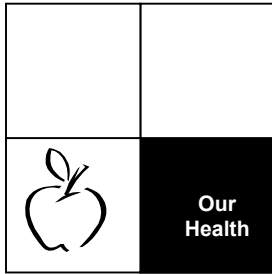
Non-Communicable Disease

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 5th 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.
	Males							
	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
	Females							
	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

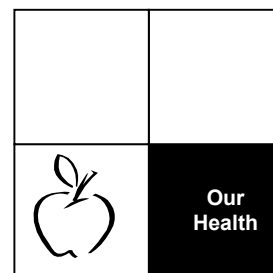*** Rate is significantly higher than all other ethnicities of same sex

** 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

Source: NCCC, *Cancer Incidence & Mortality in the SF Bay Area, 1988-1999*. December, 2001

Non-Communicable Disease

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

Percent of Population
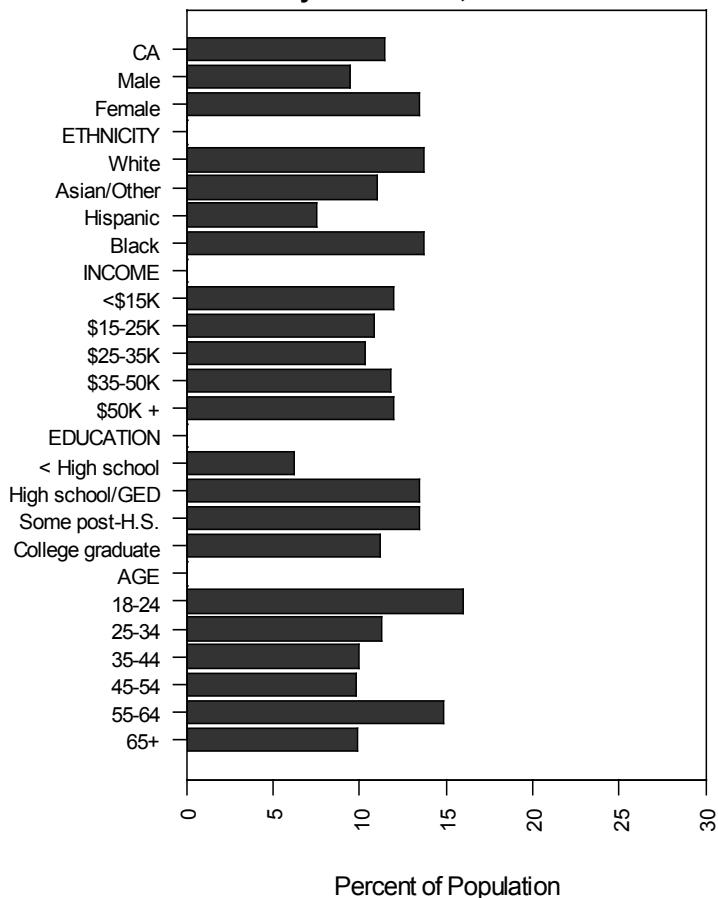
ASTHMA

Asthma ranked 9th 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.

Source: BRFSS
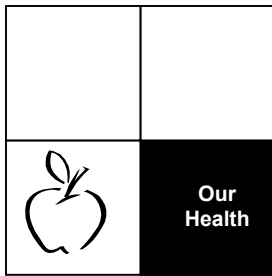
Communicable Disease

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

| | Number of Cases | | | | | 1997-2000 Change | |
	1990	1993	1997	2000	2001*	No.	%
Transmission Category							
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%
Gender							
Male	2267	2248	831	485	360	-346	-42%
Female	67	106	60	61	35	1	2%
Transgender			23	12	12	-11	-48%
Ethnicity							
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	**
Total	2334	2354	914	558	407	-356	-39%

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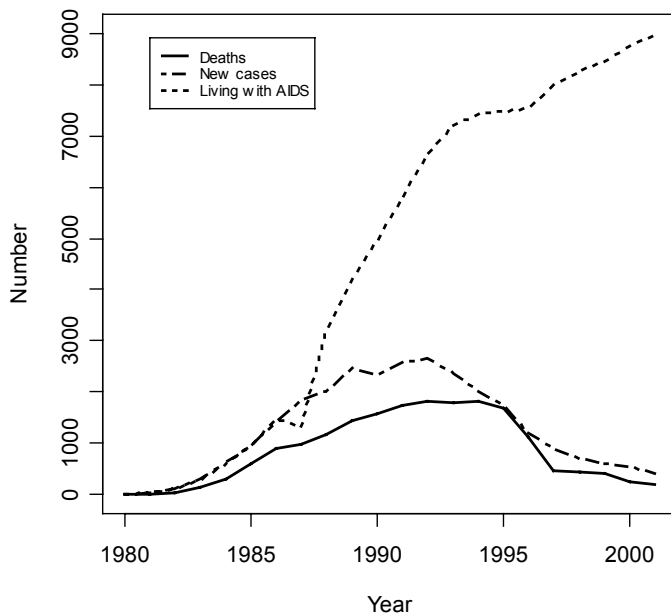
**Median Months of HIV Survival after AIDS illness
diagnosis by risk, gender, race/ethncicity,
and Year of Diagnosis, San Francisco, 1987-1998**

| | Years | | |
	1987-89	1990-94	1994-98
No. of Cases	5,042	8,359	3,045
Risk Category			
MSM	19	17	63
IDU	15	16	37
MSM + IDU	17	16	45
Other	15	16	56
Gender			
Male	19	17	59
Female	16	18	56
Ethnicity			
White	19	17	62
African Am.	15	16	43
Latino	18	17	65
Other	18	19	53
Total	19	17	59

source: *HIV/AIDS Epidemiology Annual Report, 2000*. (Nov. 2001)
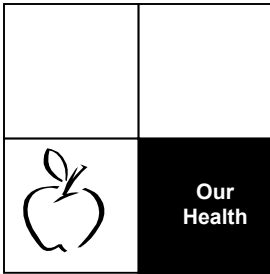
Communicable Disease
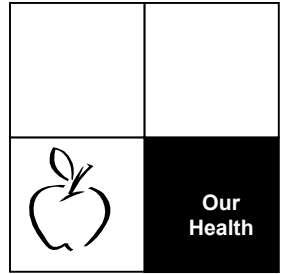
HIV/AIDS—continued
Highly Active Anti-Retroviral Therapy (HAART) use increased survival for all groups, but "was more common among MSM and heterosexuals with AIDS than among heterosexual and homosexual injection drug users."

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

Percent Receiving HAART
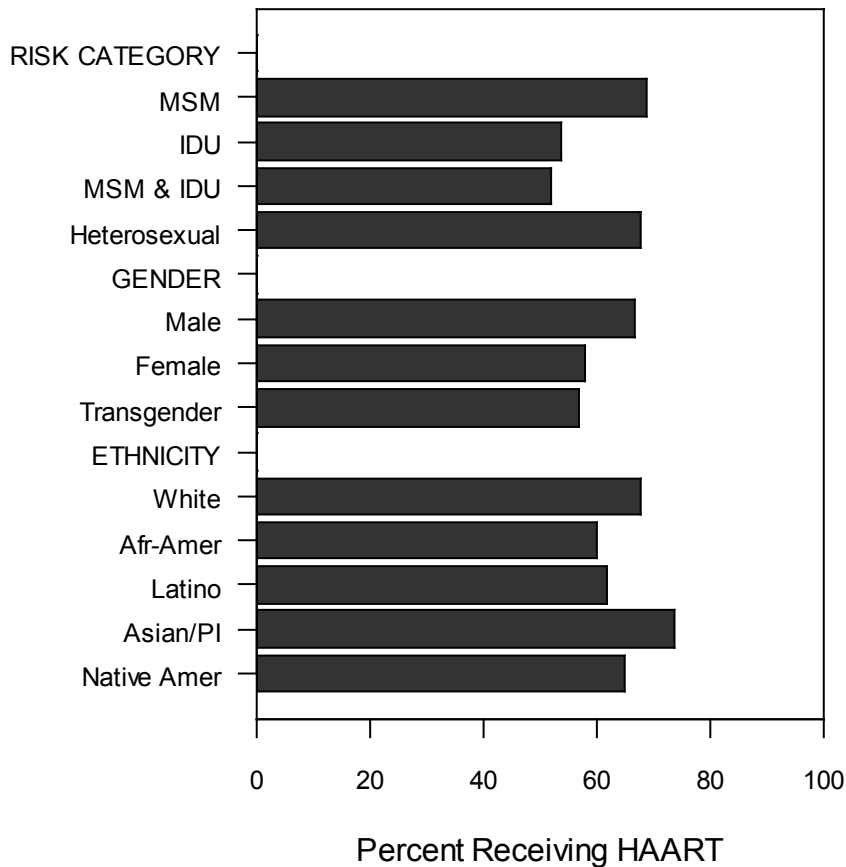
Communicable Disease

Sexually Transmitted Diseases among San Francisco Residents, 1998-2001

Disease	Number of Cases				Change,	Rates*				Change,
	1998	1999	2000	2001	2000-2001	1998	1999	2000	2001	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 reslease if annual report.

sources: SFDPH, "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

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

Legend:
— adult syphilis
⋯ prim.& sec. syphilis
–·– early syphilis
– – rectal gonorrhea
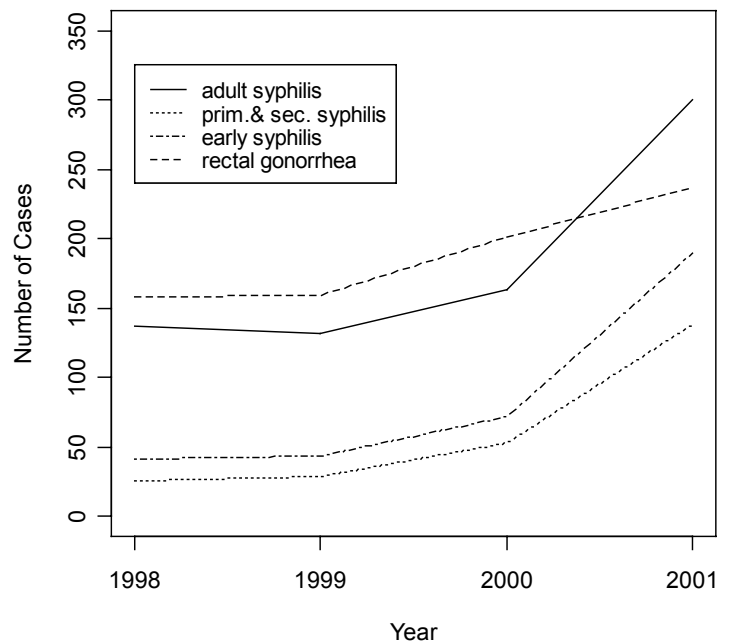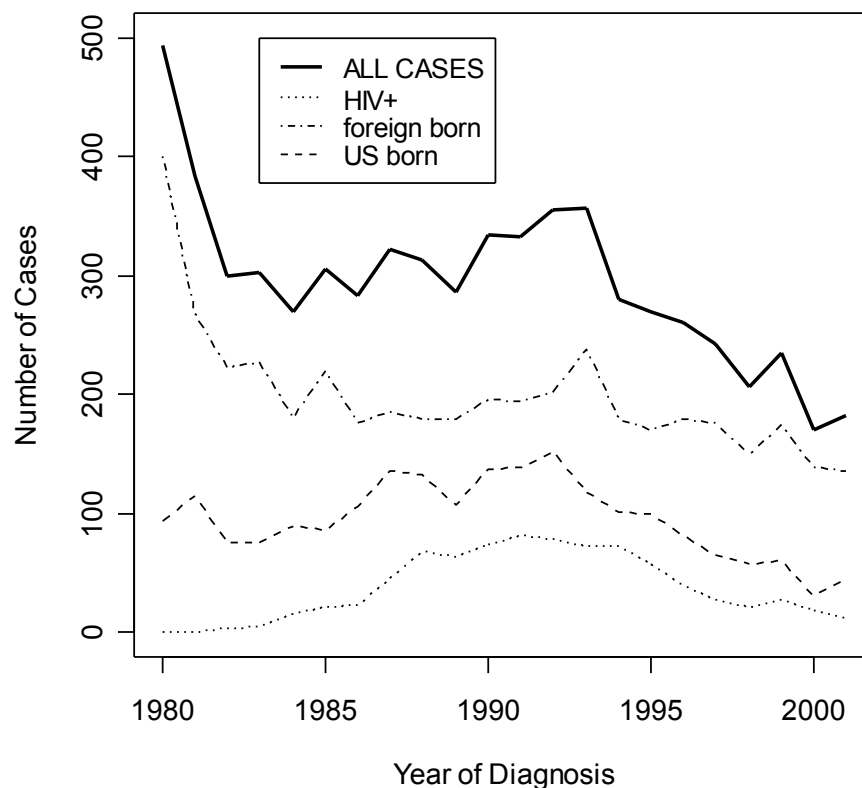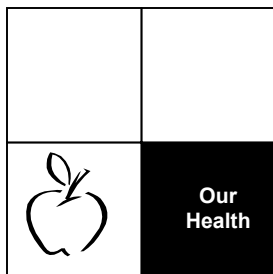
Year

Communicable Disease
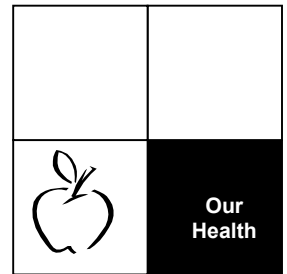
TUBERCULOSIS

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.

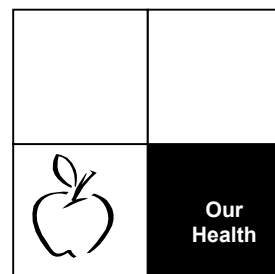## Tuberculosis Cases in San Francisco, 1980-2001

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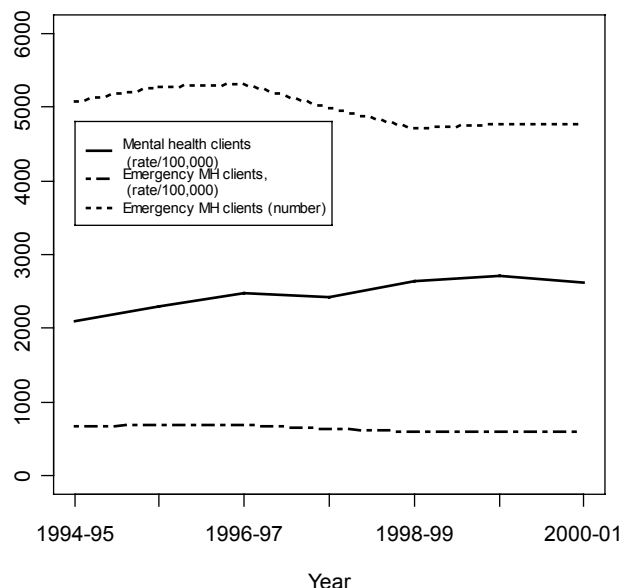
Hepatitis C Prevalence Estimates by Risk Group, San Francisco 2001

Risk group	Estimated Prevalence Low	High	Risk group prevalence	Risk group number	SF Prevalence 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

Our
Health

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

Legend:
— Mental health clients (rate/100,000)
– · – Emergency MH clients, (rate/100,000)
- - - Emergency MH clients (number)

### Suicides by Ethnicity, San Francisco,1997-2000
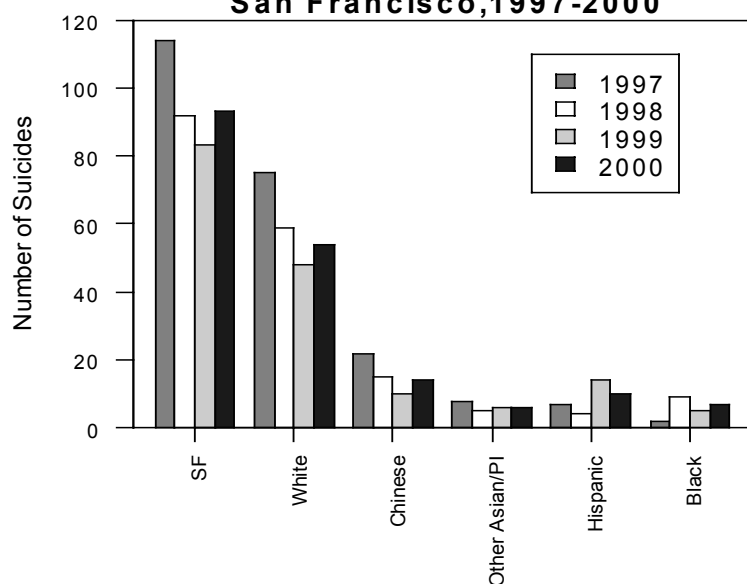
MENTAL ILLNESS

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.
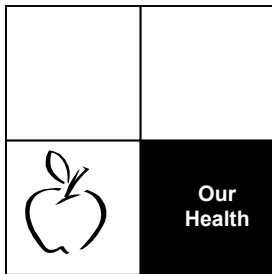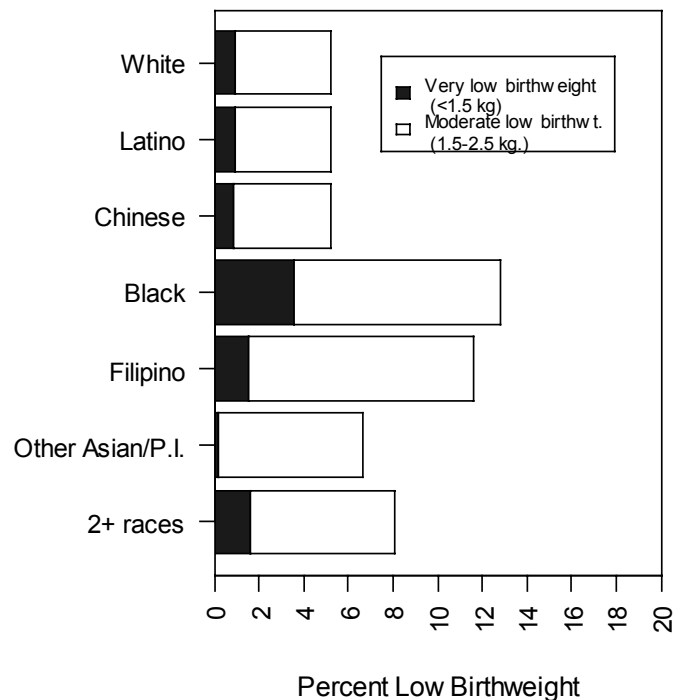
Our Health

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.
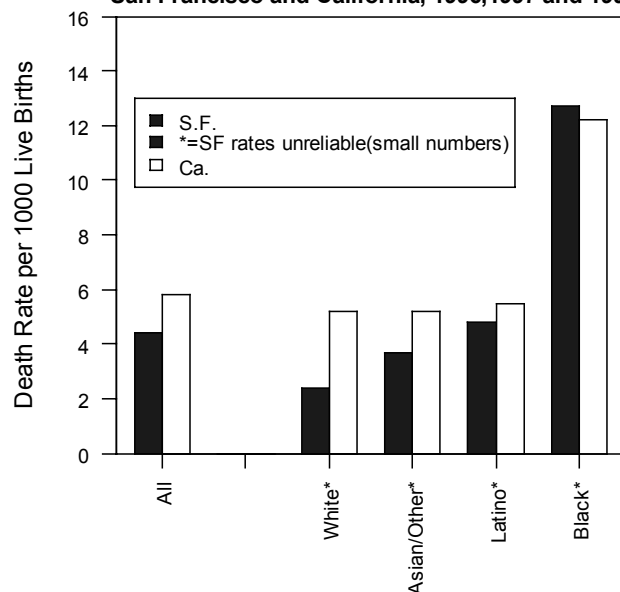
INFANT MORTALITY

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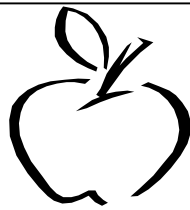
Low Birthweight by Mother's Ethnicity, San Francisco, 2000

Legend:
- ■ Very low birthweight (<1.5 kg)
- □ Moderate low birthwt. (1.5-2.5 kg.)

Categories (top to bottom): White, Latino, Chinese, Black, Filipino, Other Asian/P.I., 2+ races

X-axis: Percent Low Birthweight (0 to 20)

San Francisco and California, 1996,1997 and 1999

Legend:
- ■ S.F.
- ■ *=SF rates unreliable(small numbers)
- □ Ca.

Y-axis: Death Rate per 1000 Live Births (0 to 16)

Categories: All, White*, Asian/Other*, Latino*, Black*

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 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 approporiate 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

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 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 (OSHPD). 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