Community Health Indicators for Selected Cities and Places

in Contra Costa County

Hospital Council

August 2004

Dear Reader,

This report describes selected community health indicators for specific cities and places in Contra Costa County, California. The report was prepared by Contra Costa Health Services' Community Health Assessment Planning and Evaluation (CHAPE) group on behalf of the Hospital Council of Northern and Central California. The health indicators included in the report were selected by the Hospital Council members to help them better plan and carry out their many community health projects. The selected communities were among the largest cities in the county or in ZIP codes that have been identified as disproportionately impacted by health disparities.

The Hospital Council hopes that other agencies and individuals working to improve community health will also find this report useful. With that in mind, we have written this report for a broad audience. As a reader you should be able to understand the research findings and methods without any prior experience with health statistics.

For example, at the beginning of each report section, there are summaries of key findings. In addition, each report section is designed to be skimmed and important local data is presented in bold text. Highlighted throughout the report is data describing national benchmarks, health disparities, and the size & scope of important local health concerns. We hope this innovative layout will make it easier for readers to find the data they are looking for and/or gain a quick understanding of a new health concern.

There are many recommendations that could be made after reviewing the information in this report. One key recommendation is that more effort be directed to addressing local health disparities. Improving access to health services and the quality of health care that our African American, Latino and Asian residents receive is crucial not only to these individuals and families, but also to the communities in which they live. This includes working with residents to improve the physical and social environment in which they live, work and play.

We have appreciated this chance to work in partnership with the Hospital Council on this report and hope that it contributes to the goal of improving the health of all Contra Costa residents.

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Community Health Indicators for Selected Cities and Places in Contra Costa County

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CONTRA COSTA
HEALTH SERVICES

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How to use data to make decisions

Using data to make decisions relies upon establishing clear and agreed-upon criteria for making decisions. This section describes key decision-making criteria used in public health and a brief description of how to establish criteria for making decisions "out loud."

Decision-making criteria

In public health, many important health problems, and limited resources to address them, can make decision-making especially challenging. There are three key decision-making criteria which public health professionals and community leaders have used successfully to choose their priorities: 1) comparisons to national standards (or benchmarks); 2) unfair health differences based on racial and geographic factors; and 3) the overall size and scope of health concerns.

Examples of research findings

Even with this limited number of criteria, decision makers will feel a "push and pull" when deciding health priorities. For instance, health disparities most often affect racial minorities — by definition, "minorities" means that these individuals make up a smaller portion of the overall population. A disturbing racial health disparity, therefore, may not represent a very large number of deaths or diagnoses within the county's population. There are many other measurements of unmet community health needs. It is important to choose only a couple of decision-making criteria and stay focused on what you are trying to accomplish.

National standards and benchmarks

Healthy People 2010 was built using the best scientific knowledge and expert advice. Its objectives and benchmarks are designed to measure local and national progress in improving community health. These standards are also used to plan and evaluate many federally funded health programs. These standards allow us to easily compare the health of county residents to that of California and the nation as a whole. When we fail to meet a HP2010 locally, it means we have work left to do.

"Healthy People 2010 (HP2010) is the prevention agenda for the Nation. It is a statement of national health objectives designed to identify the most significant preventable threats to health and to establish national goals to reduce these threats."

(Source: Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services at http://odphp.osophs.dhhs.gov/pubs/prevrpt/2000winpr/LeadingHealthIndicators.htm)

Health disparities

(Other words for "disparity" include inequality, unlikeness, disproportion, and difference.)
Disparities occur when certain population groups do not enjoy the same health status as other groups. Disparities are most often identified along racial and ethnic lines, showing that African Americans, Hispanics, Native Americans, Asian Americans, Alaska Natives and Whites have different disease or death rates. But disparities also extend beyond race and ethnicity. For example, cancer health disparities can involve genetic, geographical, environmental and behavioral factors, as well as differences based on income and education. This report often shows differences in death rates between communities that are greater than those found between racial groups.

Health care disparities are costly. Poorly managed care or missed diagnoses result in expensive and avoidable complications, not to mention unnecessary suffering. For example, end-stage renal disease may result from longstanding poorly controlled diabetes. This difficult and costly condition can often be avoided with timely access to health services and effective management of diabetes.

Why do racial and ethnic disparities exist? There is no single simple answer. Racial and ethnic minorities tend to receive lower-quality health care than Whites, even when insurance status, income, age and severity of conditions are comparable, says a 2002 report of the Institute of Medicine.

While health disparities have been framed historically as racial and ethnic differences, science now recognizes that race and ethnic classifications have been socially and politically determined and have no basis in biological science

.
In other words, health disparities result from unfair treatment — when one group of Americans receives inferior care compared to another.
(Source: National Cancer Institute at http://crchd.nci.nih.gov/chd/racial_ethnic_disparities.html)

Large numbers

Some health problems are large in their size and scope. The local death rates may be similar to rates found at the State or National level, but because of the large number of Contra Costa residents affected, these health concerns deserve our attention.

Deciding "out loud"

Whenever you make a decision with another person or with a group, it's best to make your decision "out loud." Deciding "out loud" means taking the time to discuss and come to some agreement about your group's criteria for making decisions. This will include spending time talking about your individual values and hopes for success. Discussing individual and group values and opinions can be unfamiliar and sometimes uncomfortable, but it is a crucial step in any group planning process.

Here are seven practical steps to making decisions "out loud." By following these steps you can help focus your group's attention and resources, and make quick progress in your decision-making.

The 7 Steps to Deciding "Out Loud:"

1. Clarify the decision to be made
2. Form your group
3. Establish your decision-making criteria
4. List all your options
5. Collect the information you need
6. Rank your options
7. Reach agreement

Be clear about the task at hand (Step 1). As a group leader you'll need to describe your priority-setting process simply to other people. The best practice is to write a short goal statement, which outlines the "who, what, where, when and how" of the work ahead.

Choose your group members thoughtfully (Step 2). You will want to recruit group members with diverse background and opinions to enrich your planning process. Despite all their differences, you'll want each of your members to possess the same three qualities: enthusiasm, critical thinking and credibility.

Choosing decision-making criteria (Step 3) is the step most often overlooked. You need to decide how your group is going to decide. Will you pick a health concern with the highest death rates? The one that affects the greatest number of residents? Or will it be the one that generates the most community concern? The data in this report will not answer these questions; instead you need to look to the opinions and expertise of your fellow group members. Prioritizing decision-making criteria early on builds your planning group's sense of solidarity, purpose and commitment.

When asked, most people will say that they want to choose a project or activity that is important and feasible. Your group should come to agreement about what these words "important" and "feasible" mean. Try to be more specific. Could you explain your decision-making criteria to someone outside your group?

Next, list all your options (Step 4). Often groups create their own list through open discussion or brainstorming. Or sometimes the list is ready-made and comes from outside the group. For instance we have given you a list of health concerns in this report, or perhaps a government or charitable agency has provided you with a separate list of appropriate/acceptable activities from which you need to choose in order to receive their funding.
Once you've listed your options, the idea is to use data related to your decision-making criteria to fairly choose between them.

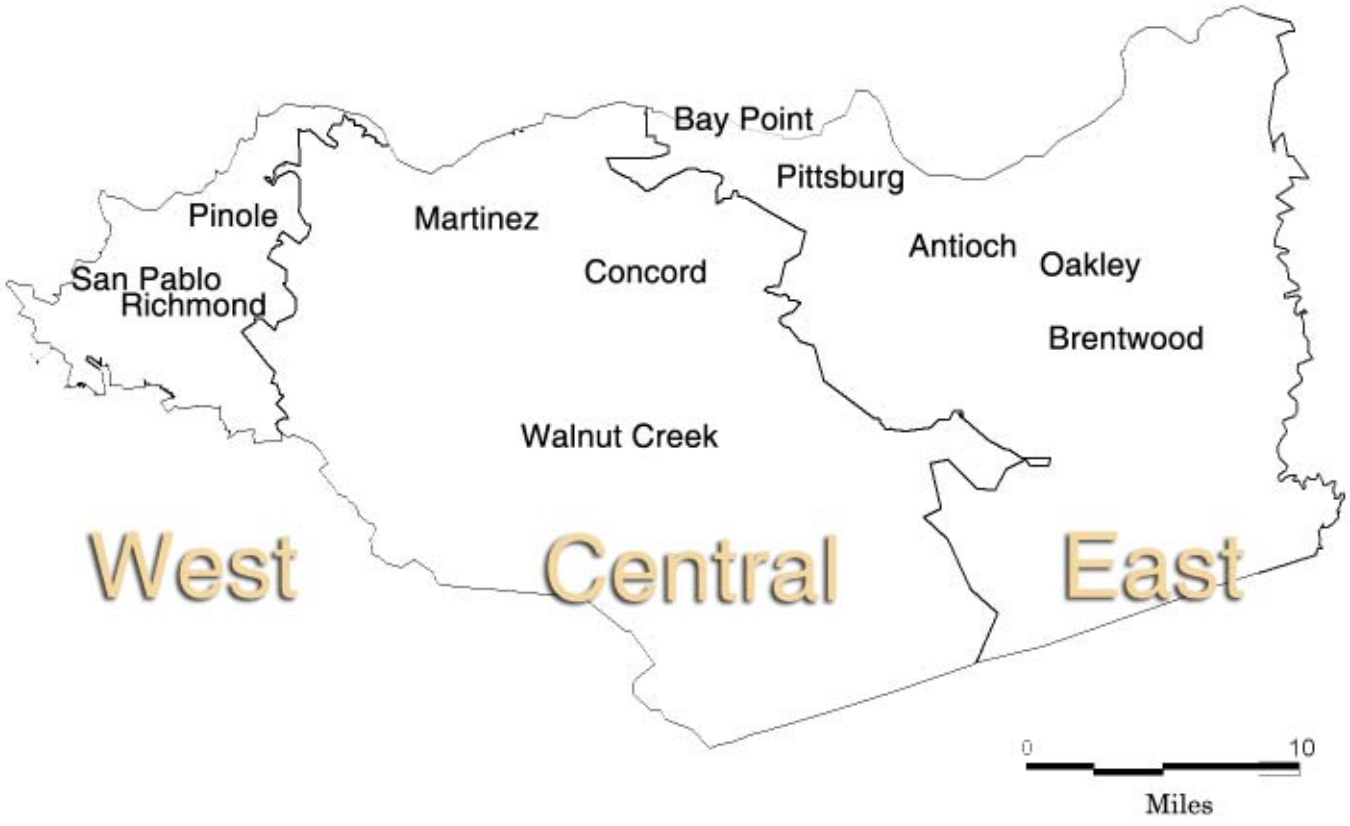
For instance, if you have decided to focus your efforts on **reducing unfair racial health differences, then you would read through this data report and collect the data you need (Steps 5)** related to health disparities.
Your group may have chosen a decision-making criterion that is outside the scope of this report. Fortunately, the Internet has made some local planning data much easier to obtain. *(See the end of this report for Sources of Additional Data.)*
You can use your criteria and relevant data however you like to make your choices, either through political deliberations, a vote or **through some sort of mathematical ranking process (Step 6)**. Although a "mathematical ranking process" sounds technical, it often makes decision-making easier, especially if you are trying to rate a long list of options. Ranking can be as simple as giving a score between one and five to five options you've listed for your criteria *(i.e., 5, 4, 3, 2 and 1, with no option receiving the same score).*

Although counting up scores can be a very efficient way to reach an answer, group members will still be held accountable for the decision, not for a tally sheet. So we recommend that the group **use the mathematical answers as part of the process of coming to an agreement (Step 7)**. Agree upon decision-making criteria and use those criteria to rank and choose between projects and activities. Deciding "out loud" with your group's values and rationale out in plain view of others is a crucial step towards public accountability.

For more information about Deciding Out Loud(tm) visit http://www.DecidingOutLoud.com or call (510) 435-5863.

Population Trends & Totals

Selected Cities and Places in Contra Costa County



Population Growth

There has been dramatic population growth in Contra Costa's East County communities.

Table 1. Population Growth in Selected Communities.
Contra Costa, 1990-2000

	% Growth
Brentwood	*208.1%
Antioch	*45.6%
Oakley	*39.4%
Bay Point	*23.4%
San Pablo	*20.1%
Pittsburg	*19.4%
Countywide	**18.1%**
Richmond	13.5%
Martinez	12.8%
Concord	9.4%
Pinole	9.0%
Walnut Creek	6.2%

* Indicates that the rate of growth in these six communities is greater compared to the county overall.

Contra Costa's population has grown by 18.1%

Five East County communities, Brentwood (208.1%), Antioch (45.6%), Oakley (39.4%), Bay Point (23.4%), and Pittsburg (19.4%) as well as the west county community of San Pablo (20.1%) had growth rates that were higher than the county's growth rate (18.1%).

The community of Brentwood more than tripled its population over the last 10 years, adding a total of 15,739 new residents. San Pablo (located in West County) has grown by 20.1%, adding 5,057 new residents during the last ten years.

Table 2. Number of New Residents by Community, 1990-2000

	2000 Pop.	1990 Pop.	New Residents
Antioch	90,532	62,195	28,337
Brentwood	23,302	7,563	15,739
Richmond	99,216	87,425	11,791
Concord	121,780	111,348	10,432
Pittsburg	56,769	47,564	9,205
Oakley	25,619	18,374	7,245
San Pablo	30,215	25,158	5,057
Bay Point	21,534	17,453	4,081
Martinez	35,866	31,808	4,058
Walnut Creek	64,296	60,569	3,727
Pinole	19,039	17,460	1,579
All Other Communities	360,648	316,815	43,833
Countywide	**948,816**	**803,732**	**145,084**

The largest increase in the number of new residents was in the city of Antioch (28,337).

Two East County communities (Antioch and Brentwood) represented 30.4% of the growth for the entire county, with a combined total of 44,076 new residents.

Richmond has grown 13.5% over the last 10 years with a total of 11,791 new residents.

Data sources

U.S. Census Bureau, Census 2000, Summary File 1, Table P1. U.S. Census Bureau, Census 1990, Summary File 1, Table P001

Residents without Health Insurance

It is estimated that nearly 1 in 10 Contra Costa residents age 18-64 years old do not have health insurance.

Table 3. Percent of residents age 18-64 years old that do not have health insurance 2001-2002

Places	% Uninsured
Contra Costa	9.3%
Bay Area Counties	13.9%
California	22.8%

Population Groups*	% Uninsured
Latino	30.7%
African American	15.0%
Asian	11.6%
White	7.8%
Bay Area Counties	13.9%

* Due to small number of survey responses, these race/ethnic estimates combine data from the nine Bay Area Counties: Alameda, Contra Costa, Marin, Napa, Santa Clara, San Francisco, San Mateo, Solano and Sonoma. Even after combining data from the nine Bay Area counties, we were unable to calculate Bay Area estimates for other race/ethnic groups, including Native Americans/Alaska Natives and Native Hawaiian/other Pacific Islanders.

Nearly **10%** of Contra Costa adults age **18-64 years lack health insurance**. This represents approximately **43,000 residents**. In comparison, nearly a quarter of California adults age 18-64 years do not have health insurance.

People of Color have the greatest risk of being uninsured

Among Bay Area residents age 18-64 years, **Hispanic/Latinos** and **African Americans are 2 to 3 times more likely than Whites to be without health insurance**. National studies also find that Hispanic/Latinos and African Americans are more likely to be uninsured.

People with low incomes are much more likely to be uninsured

In a national survey of non-elderly Americans, more than half of those with incomes below the federal poverty level (60.9%) and between poverty and twice the poverty level (53.5%) were uninsured.

Many low-income working families without job-based health insurance earn too much to be eligible for government subsidized insurance programs like Medi-Cal or Healthy Families.

Research shows that people without health insurance are much more likely to be sicker and die earlier than those who have insurance. Children and families without health insurance put off visits to the doctor, and as a result tend to be sicker when they finally seek care. Without the care of a regular physician, families are more likely to go to the emergency room for treatment.

Data Sources and Methods

The estimates in this report were calculated using data from the California Health Interview Survey and scientifically derived multipliers from the California Health Care Foundation. These multipliers allowed us modify the CHIS estimates in order to provide more accurate high-end estimates for each group.

The California Health Interview Survey's AskCHIS data query system, copyright (c) 2003 the Regents of the University of California, all rights reserved, provided the foundation for calculating the estimates in this report. Data from the California Health Interview survey are available online at http://www.chis.ucla.edu/

(Note: The AskCHIS data are generated from a telephone survey that asks questions to a randomly selected group of adults in Contra Costa and other counties in California. Since these statistics are estimates, we do not recommend using them for evaluation purposes.)

Studies have found that health insurance levels from the California Health Interview Survey are under reported and that there are wider gaps between the estimates for certain groups, such as African Americans. To account for this, we used the California Health Care Foundation's multipliers to obtain more accurate high-end estimates for each group. There was no multiplier specific to Asians, so we used the 'other' multiplier for this group. We were unable to calculate confidence intervals or statistical significance for these estimates. For more information please see the California HealthCare Foundation's California's Uninsured and Medi-Cal Populations: A Policy Guide to the Estimates at http://www.chcf.org.

National comparisons from Families USA. One in three: Non-elderly Americans without health insurance, 2002-2003. Available online at http://www.familiesusa.org.

Information about eligibility for government subsidized health insurance programs from Contra Costa County Children and Families Policy Forum. Contra Costa County Children's Report Care: Health Insurance, 2003. Available online at http://www.cocoschools.org/about/reptcard.html.

Poverty

Nearly 20% of Contra Costa's residents live in poverty. In some communities the poverty rate is much greater

Table 4. Residents Living in Poverty. Contra Costa Communities, 2000

	% Community Residents	Residents Living in Poverty
San Pablo	*42.8%	12,938
Richmond	*36.3%	36,047
Bay Point	*33.4%	7,188
Pittsburg	*28.5%	16,210
Concord	*20.9%	25,417
Antioch	*19.9%	18,015
Countywide	18.5%	175,065
Brentwood	15.5%	3,616
Oakley	14.6%	3,741
Pinole	12.7%	2,417
Martinez	11.8%	4,224
Walnut Creek	10.6%	6,797

[*] Indicates that the percent living in poverty is significantly higher in these communities compared to the county as a whole. We are 95% certain that these differences are not due to chance.

At least **175,065 Contra Costa residents live in poverty**. This represents 18.5% of the county's population.
San Pablo (42.8%), **Richmond** (36.3%) and **Bay Point** (33.4%) **have the highest percentages of poverty** - each of these communities with at least one-third of their residents living in poverty.

The largest number of poor residents live in Richmond (36,047), followed by **Concord** (25,417).

We define poverty as 200% of the Federal Level

Because of the high cost of living in Contra Costa County, we have calculated poverty rates to include all county residents who reported a gross income less than 200% of the Federal Poverty Level. In the year 2000, this amount ranged from $16,700 for a person living alone to $34,100 for a family of four and $57,300 for a family of eight.

Confidence intervals are available
You may download and view all detailed tables with 95% confidence intervals, at *http://www.cchealth.org/health_data/hospital_council/*

Data source

U.S. Census Bureau, Census 2000 American FactFinder, Summary File 3, Tables P88.

Education

Nearly 13% of Contra Costa's residents lack a high school diploma. In San Pablo and Bay Point, the rates are more than twice as high.

Table 5. Educational attainment (percent) for residents age 25 & over. Contra Costa County 2000

	No high school diploma	High school diploma[1]	Some college	College graduate[2]
San Pablo	*37.6%	26.1%	25.9%	10.4%
Bay Point	*28.2%	26.5%	33.2%	12.1%
Richmond	*24.6%	21.8%	31.2%	22.4%
Pittsburg	*24.3%	25.9%	35.1%	14.7%
Brentwood	*17.1%	25.4%	36.6%	20.9%
Concord	*15.3%	23.2%	35.6%	25.9%
Oakley	*15.2%	30.4%	40.7%	13.7%
Antioch	*14.3%	28.6%	38.9%	18.2%
Countywide	**13.1%**	**19.8%**	**32.1%**	**35.0%**
Pinole	11.7%	24.2%	36.5%	27.6%
Martinez	8.9%	20.3%	38.7%	32.1%
Walnut Creek	5.1%	12.6%	28.4%	53.9%

[1] Includes GED recipients
[2] Includes graduate school and higher educational attainment
[*] Indicates that the percentage of residents age 25 and over who do not have a high school diploma is greater in these communities compared to the county overall.
The differences starred (*) above are statistically significant. This means that we are 95% certain that these differences are not due to chance.

At least **81,867 residents lack a high school diploma**. This represents13.1% of the County's population.

San Pablo, Bay Point, Richmond and Pittsburg have the lowest rates of educational attainment.

More than half of Walnut Creek residents (53.9%) are college graduates.

Table 6. Educational attainment (number) for residents age 25 & over. Contra Costa County 2000

	No high school diploma[1]	High school diploma	Some college	College graduate[2]
Richmond	15,446	13,672	19,526	14,018
Concord	12,244	18,560	28,563	20,763
Pittsburg	8,126	8,632	11,716	4,914
Antioch	7,735	15,480	21,015	9,811
San Pablo	6,522	4,529	4,489	1,807
Bay Point	3,479	3,269	4,094	1,497
Walnut Creek	2,521	6,290	14,204	26,971
Brentwood	2,413	3,592	5,167	2,953
Oakley	2,258	4,503	6,030	2,036
Martinez	2,251	5,111	9,748	8,091
Pinole	1,531	3,150	4,764	3,600
Countywide	**81,867**	**123,956**	**200,770**	**219,048**

[1] Includes GED recipients
[2] Includes graduate school and higher educational attainment
[*] Indicates that the number of residents age 25 and over who do not have a high school diploma is greater in these communities compared to the county overall. The differences starred (*) above are statistically significant. This means that we are 95% certain that these are true differences and not due to chance alone.

The largest numbers of residents lacking a high school diploma live in the cities of Richmond (15,446) and **Concord** (12,244).

The largest number of college graduates live in Walnut Creek (26,971).

Data sources

United States Census Bureau: Census 2000.
American FactFinder, Summary File 3, Tables P37.

Confidence intervals are available
You may download and view all detailed tables with 95% confidence intervals, at http://cchealth.org/health_data/hospital_council/

Census 2000 Summary Table

Includes: Race, age, gender, income, linguistic isolation, and disability status

	California		Contra Costa County		Antioch		Bay Point		Brentwood	
TOTAL POPULATION	33,871,648		948,816		90,532		21,534		23,302	
RACE/ETHNICITY										
White	15,816,790	46.7%	549,409	57.9%	50,644	55.9%	6,946	32.3%	14,692	63.1%
Hispanic/Latino	10,966,556	32.4%	167,776	17.7%	20,024	22.1%	8,321	38.6%	6,565	28.2%
Asian	3,648,860	10.8%	102,681	10.8%	6,510	7.2%	2,363	11.0%	632	2.7%
African American	2,181,926	6.4%	86,851	9.2%	8,551	9.4%	2,633	12.2%	553	2.4%
Two or more races	903,115	2.7%	32,658	3.4%	3,802	4.2%	880	4.1%	665	2.9%
American Indian/Alaska Native	178,984	0.5%	3,648	0.4%	513	0.6%	157	0.7%	95	0.4%
Native Hawaiian/ Other /Pacific Islander	103,736	0.3%	3,157	0.3%	310	0.3%	157	0.7%	49	0.2%
Some other race	71,681	0.2%	2,636	0.3%	178	0.2%	77	0.4%	51	0.2%
GENDER AND AGE										
Male	16,874,892	49.8%	463,270	48.8%	44,331	49.0%	10,797	50.1%	11,487	49.3%
Female	16,996,756	50.2%	485,546	51.2%	46,201	51.0%	10,737	49.9%	11,815	50.7%
Under 5 years	2,486,981	7.3%	66,128	6.9%	7,820	8.6%	2,091	9.7%	2,263	9.7%
5 to 9 years	2,725,880	8.0%	73,031	7.8%	8,592	9.5%	2,151	10.0%	2,371	10.2%
10 to 14 years	2,570,822	7.6%	72,017	7.6%	8,214	9.1%	1,869	8.7%	2,002	8.6%
15 to 19 years	2,450,888	7.2%	63,124	6.6%	7,002	7.7%	1,681	7.8%	1,524	6.5%
20 to 24 years	2,381,288	7.0%	50,696	5.3%	5,025	5.6%	1,617	7.5%	1,080	4.6%
25 to 29 years	2,543,541	7.5%	57,200	6.0%	5,487	6.0%	1,693	7.9%	1,280	5.5%
30 to 34 years	2,685,521	7.9%	69,187	7.3%	7,186	7.9%	1,800	8.3%	2,155	9.2%
35 to 39 years	2,814,743	8.3%	81,966	8.7%	8,577	9.5%	1,903	8.8%	2,351	10.2%
40 to 44 years	2,670,598	7.9%	81,789	8.6%	8,038	8.9%	1,704	7.9%	2,002	8.6%
45 to 49 years	2,331,792	6.9%	74,223	7.8%	6,566	7.2%	1,327	6.2%	1,227	5.3%
50to 54 years	1,999,843	5.9%	67,765	7.2%	5,229	5.8%	1,070	5.0%	1,069	4.6%
55 to 59 years	1,467,252	4.3%	48,758	5.1%	3,628	4.0%	777	3.6%	893	3.8%
60 to 64 years	1,146,841	3.4%	35,660	3.8%	2,460	2.7%	534	2.5%	852	3.7%
65 to 69 years	984,535	2.9%	28,637	3.1%	1,960	2.2%	416	1.9%	752	3.2%
70 to 74 years	903,288	2.7%	26,085	2.7%	1,732	1.9%	341	1.6%	636	2.7%
75 to 79 years	779,347	2.3%	23,637	2.6%	1,372	1.5%	285	1.3%	420	1.8%
80 to 84 years	502,831	1.5%	15,542	1.6%	909	1.1%	172	0.9%	253	1.1%
85 to 89 years	280,895	0.8%	8,702	0.9%	456	0.5%	71	0.3%	120	0.5%
90 years and over	144,762	0.4%	4,669	0.4%	279	0.3%	32	0.1%	52	0.2%
Median age (years) both sexes	**33.3**	**(X)**	**36.4**	**(X)**	**32.3**	**(X)**	**29.1**	**(X)**	**32.7**	**(X)**
Male	32.2	(X)	35.3	(X)	31.3	(X)	28.2	(X)	32.5	(X)
Female	34.4	(X)	37.5	(X)	33.1	(X)	30.1	(X)	32.9	(X)

	California		Contra Costa County		Antioch		Bay Point		Brentwood	
EDUCATIONAL ATTAINMENT (population 25 years and over)										
No high school diploma	4,942,743	23.2%	81,867	13.1%	7,735	14.3%	3,479	28.2%	2,413	17.1%
High school diploma	4,288,452	20.1%	123,956	19.8%	15,480	28.6%	3,269	26.5%	3,592	25.4%
Some college	6,397,739	30.0%	200,770	32.1%	21,015	38.9%	4,094	33.2%	5,167	36.6%
College graduate	3,640,157	17.1%	142,909	22.8%	7,302	13.5%	1,086	8.8%	2,140	15.2%
Graduate school and higher	2,029,809	9.6%	76,139	12.2%	2,509	4.7%	411	3.3%	813	5.7%
Total	**21,298,900**	100.0%	**625,641**	100.0%	**54,041**	100.0%	**12,339**	100.0%	**14,125**	100.0%
MEDIAN HOUSEHOLD INCOME IN 1999										
Household income in dollars	47, 493	(X)	63,675	(X)	60,359	(X)	44,951	(X)	69,198	(X)
POVERTY STATUS (1999 income under 200% of FPL) and percent of population										
Under 18 years (percent reflects population age 0-17)	3,855,578	41.7%	58,210	23.1%	7,302	25.0%	2,909	40.7%	1,399	18.3%
Age 18 and over (percent reflects population age 18 and over)	7,087,558	28.8%	116,855	16.8%	10,713	17.5%	4,279	29.7%	2,217	14.2%
All ages below 200% of federal poverty level	10,943,136	32.3%	175,065	18.5%	18,015	19.9%	7,188	33.4%	3,616	15.5%
LINGUISTICALLY ISOLATED (population age 5 and over) number in household where some or all members speak a non-English language and percent of population										
In households where some members speak a non-English lanuage	123,206	0.3%	2,503	0.3%	237	0.3%	141	0.6%	68	0.3%
In households where all members speak a non-English lanuage	3,349,064	9.9%	52,466	5.5%	4,016	4.4%	2,504	11.6%	1,421	6.1%
Total linguistic isolated	3,472,270	10.2%	54,969	5.8%	4253	4.7%	2645	12.2%	1489	6.4%
DISABILITY STATUS (noninstitutionalized) and percent of population										
5 to 15 years	373,407	1.1%	10,073	1.1%	1,253	1.4%	575	2.7%	381	1.6%
16 to 64 years	7,241,881	21.4%	168,698	17.8%	16,262	17.9%	6,528	30.3%	3,690	15.8%
65 years and over	2,977,123	8.8%	84,726	8.9%	5,868	6.5%	1,107	5.1%	1,329	5.7%
All ages 5 and over	10,592,411	31.3%	263,497	27.8%	23,383	25.8%	8,210	38.1%	5,400	23.1%

Data sources

Source: United States Census Bureau, Census 2000, Summary file 3 Sample Data,Tables QT-PL (Basic Facts), P8, P37, P41, P53, P88, PCT14
More detailed census information is available from the American Factfinder (factfinder.census.gov)
Data assembled by: Community Health Assessment, Planning and Evaluation group (CHAPE), Public Health Division, CCHS, August 2004

	Concord		Martinez		Oakley		Pinole		Pittsburg	
TOTAL POPULATION	121,780		35,866		25,619		19,039		56,769	
RACE/ETHNICITY										
White	74,119	60.9%	27,096	75.5%	16,469	64.3%	9,219	48.4%	17,697	31.2%
Hispanic/Latino	26,560	21.8%	3,660	10.2%	6,399	25.0%	2,618	13.8%	18,287	32.2%
Asian	11,264	9.2%	2,340	6.5%	708	2.8%	4,092	21.5%	7,031	12.4%
African American	3,530	2.9%	1,181	3.3%	832	3.2%	2,079	10.9%	10,457	18.4%
Two or more races	4,857	4.0%	1,248	3.5%	953	3.7%	835	4.4%	2,433	4.3%
American Indian/Alaska Native	580	0.5%	188	0.5%	151	0.6%	68	0.4%	210	0.4%
Native Hawaiian/Other Pacific Islander	551	0.5%	80	0.2%	65	0.3%	62	0.3%	464	0.8%
Some other race	319	0.3%	73	0.2%	42	0.2%	66	0.3%	190	0.3%
GENDER AND AGE										
Male	60,147	49.4%	17,794	49.6%	12,943	50.5%	9,145	48.0%	27,887	49.1%
Female	61,633	50.6%	18,072	50.4%	12,676	49.5%	9,894	52.0%	28,882	50.9%
Under 5 years	8,625	7.1%	2,000	5.6%	2,177	8.5%	1,083	5.7%	4,739	8.3%
5 to 9 years	8,887	7.3%	2,261	6.3%	2,629	10.3%	1,283	6.7%	5,080	8.9%
10 to 14 years	8,336	6.9%	2,355	6.6%	2,670	10.4%	1,511	7.9%	4,908	8.6%
15 to 19 years	8,057	6.6%	2,330	6.5%	2,080	8.1%	1,364	7.2%	4,532	8.1%
20 to 24 years	7,848	6.4%	1,817	5.1%	1,225	4.8%	1,003	5.3%	4,153	7.3%
25 to 29 years	8,979	7.3%	2,110	5.9%	1,446	5.6%	912	4.8%	4,164	7.4%
30 to 34 years	9,858	8.1%	2,689	7.5%	2,191	8.6%	1,185	6.2%	4,285	7.5%
35 to 39 years	10,900	8.9%	3,324	9.3%	2,736	10.7%	1,602	8.4%	4,728	8.3%
40 to 44 years	10,178	8.3%	3,564	9.9%	2,470	9.6%	1,696	8.9%	4,513	7.9%
45 to 49 years	8,978	7.5%	3,351	9.4%	1,784	7.0%	1,551	8.1%	3,920	6.9%
50to 54 years	7,968	6.5%	2,930	8.2%	1,341	5.3%	1,444	7.6%	3,200	5.6%
55 to 59 years	5,718	4.8%	2,095	5.8%	841	3.3%	1,105	5.8%	2,149	3.8%
60 to 64 years	4,382	3.6%	1,412	3.9%	651	2.5%	844	4.5%	1,738	3.2%
65 to 69 years	3,729	3.2%	1,020	2.8%	440	1.7%	691	3.7%	1,331	2.3%
70 to 74 years	3,214	2.6%	900	2.5%	400	1.5%	608	3.2%	1,205	2.1%
75 to 79 years	2,861	2.3%	817	2.3%	256	1.0%	504	2.6%	962	1.7%
80 to 84 years	1,810	1.5%	511	1.4%	175	0.7%	351	1.8%	598	1.2%
85 to 89 years	1,000	0.8%	257	0.7%	81	0.3%	194	1.1%	367	0.6%
90 years and over	452	0.3%	123	0.3%	26	0.1%	108	0.5%	197	0.3%
Median age (years) both sexes	**35.1**	**(X)**	**38.6**	**(X)**	**31.5**	**(X)**	**38.7**	**(X)**	**30.9**	**(X)**
Male	33.7	(X)	37.5	(X)	31.0	(X)	37.3	(X)	29.9	(X)
Female	36.5	(X)	39.7	(X)	31.9	(X)	40.0	(X)	31.9	(X)
EDUCATIONAL ATTAINMENT (population 25 years and over)										
No high school diploma	12,244	15.3%	2,251	8.9%	2,258	15.2%	1,531	11.7%	8,126	24.3%
High school diploma	18,560	23.2%	5,111	20.3%	4,503	30.4%	3,150	24.2%	8,632	25.9%
Some college	28,563	35.6%	9,748	38.7%	6,030	40.7%	4,764	36.5%	11,716	35.1%
College graduate	14,998	18.7%	5,678	22.5%	1,574	10.6%	2,529	19.4%	3,822	11.4%
Graduate school and higher	5,765	7.2%	2,413	9.6%	462	3.1%	1,071	8.2%	1,092	3.3%
Total	**80,130**	100.0%	**25,201**	100.0%	**14,827**	100.0%	**13,045**	100.0%	**33,388**	100.0%
MEDIAN HOUSEHOLD INCOME IN 1999										
Household income in dollars	55,597	(X)	63,010	(X)	65,589	(X)	62,256	(X)	50,557	(X)

	Concord		Martinez		Oakley		Pinole		Pittsburg	
POVERTY STATUS (1999 income under 200% of FPL) and percent of population										
Under 18 years (percent reflects population age 0-17)	7,846	25.4%	910	11.2%	1,410	15.6%	679	14.2%	6,181	35.3%
Age 18 and over (percent reflects population age 18 and over)	17,571	19.3%	3,314	11.9%	2,331	13.9%	1,738	12.2%	10,029	25.5%
All ages below 200% of federal poverty level	25,417	20.9%	4,224	11.8%	3,741	14.6%	2,417	12.7%	16,210	28.5%
LINGUISTICALLY ISOLATED (population age 5 and over) where some or all members speak a non-English language and percent of population										
In households where some members speak a non-English lanuage	303	0.2%	64	0.2%	114	0.4%	31	0.2%	340	0.6%
In households where all members speak a non-English lanuage	9,434	7.7%	598	1.6%	475	1.9%	702	3.7%	4,509	7.9%
Total linguistic isolated	9737	7.9%	662	1.8%	589	2.3%	733	3.9%	4,849	8.5%
DISABILITY STATUS (noninstitutionalized) and percent of population										
5 to 15 years	1,090	0.9%	180	0.5%	639	2.5%	250	1.3%	635	1.1%
16 to 64 years	25,730	21.1%	6,296	17.5%	4,497	17.6%	3,153	16.6%	14,828	26.1%
65 years and over	11,102	9.1%	2,712	7.6%	1,336	5.2%	2,655	13.9%	4,964	8.7%
All ages 5 and over	37,922	31.1%	9,188	25.6%	6,472	25.3%	6,058	31.8%	20,427	35.9%

Data sources

Source: United States Census Bureau, Census 2000, Summary file 3 Sample Data,Tables QT-PL (Basic Facts), P8, P37, P41, P53, P88, PCT14
More detailed census information is available from the American Factfinder (factfinder.census.gov)
Data assembled by: Community Health Assessment, Planning and Evaluation group (CHAPE), Public Health Division, CCHS, August 2004

	Richmond		San Pablo		Walnut Creek	
TOTAL POPULATION	99,216		30,215		64,296	
RACE/ETHNICITY						
White	21,081	21.2%	4,886	16.2%	51,834	80.6%
Hispanic/Latino	26,319	26.5%	13,490	44.6%	3,851	6.0%
Asian	12,077	12.2%	4,890	16.2%	5,968	9.3%
African American	35,279	35.6%	5,403	17.9%	666	1.0%
Two or more races	3,233	3.3%	1,108	3.7%	1,590	2.5%
American Indian/Alaska Native	351	0.4%	125	0.4%	148	0.2%
Native Hawaiian/Other Pacific Islander	476	0.5%	146	0.5%	91	0.1%
Some other race	400	0.4%	167	0.6%	148	0.2%
GENDER AND AGE						
Male	48,233	48.6%	14,839	49.1%	29,683	46.2%
Female	50,983	51.4%	15,376	50.9%	34,613	53.8%
Under 5 years	7,669	7.8%	2,738	9.1%	2,854	4.4%
5 to 9 years	8,160	8.2%	2,848	9.4%	3,232	5.0%
10 to 14 years	7,637	7.7%	2,600	8.6%	3,264	5.1%
15 to 19 years	6,659	6.7%	2,323	7.7%	2,856	4.4%
20 to 24 years	7,159	7.2%	2,364	7.9%	2,454	3.8%
25 to 29 years	7,723	7.8%	2,530	8.4%	3,767	5.9%
30 to 34 years	8,009	8.1%	2,612	8.6%	4,098	6.4%
35 to 39 years	7,971	8.0%	2,354	7.8%	4,710	7.3%
40 to 44 years	7,415	7.5%	2,124	7.0%	4,819	7.5%
45 to 49 years	6,861	6.9%	1,767	5.8%	4,714	7.4%
50to 54 years	6,345	6.4%	1,467	4.8%	4,613	7.2%
55 to 59 years	4,478	4.5%	998	3.4%	3,594	5.6%
60 to 64 years	3,324	3.4%	869	2.9%	3,040	4.7%
65 to 69 years	2,711	2.7%	682	2.3%	2,982	4.6%
70 to 74 years	2,429	2.4%	571	1.9%	3,317	5.1%
75 to 79 years	2,201	2.2%	582	1.9%	3,753	5.8%
80 to 84 years	1,374	1.4%	374	1.2%	3,044	4.7%
85 to 89 years	757	0.8%	243	0.8%	2,040	3.3%
90 years and over	334	0.3%	169	0.5%	1,145	1.8%
Median age (years) both sexes	**32.8**	**(X)**	**29.5**	**(X)**	**45.1**	**(X)**
Male	31.4	(X)	28.6	(X)	42.2	(X)
Female	34.2	(X)	30.2	(X)	47.8	(X)
EDUCATIONAL ATTAINMENT (population 25 years and over)						
No high school diploma	15,446	24.6%	6,522	37.6%	2,521	5.1%
High school diploma	13,672	21.8%	4,529	26.1%	6,290	12.6%
Some college	19,526	31.2%	4,489	25.9%	14,204	28.4%
College graduate	8,845	14.1%	1,388	8.0%	16,705	33.4%
Graduate school and higher	5,173	8.3%	419	2.4%	10,266	20.5%
Total	**62,662**	100.0%	**17,347**	100.0%	**49,986**	100.0%
MEDIAN HOUSEHOLD INCOME IN 1999						
Household income in dollars	44,210	(X)	37,184	(X)	63,238	(X)

	Richmond		San Pablo		Walnut Creek	
POVERTY STATUS (1999 income under 200% of FPL) and percent of population						
Under 18 years (percent reflects population age 0-17)	13,462	49.0%	5,053	52.7%	1,070	9.5%
Age 18 and over (percent reflects population age 18 and over)	22,585	31.5%	7,885	38.2%	5,727	10.8%
All ages below 200% of federal poverty level	36,047	36.3%	12,938	42.8%	6,797	10.6%
LINGUISTICALLY ISOLATED (population age 5 and over) number in household where some or all members						
In households where some members speak a non-English lanuage	323	0.3%	198	0.6%	46	0.1%
In households where all members speak a non-English lanuage	10,109	10.2%	5,771	19.1%	2,120	3.3%
Total linguistic isolated	10432	10.5%	5969	19.7%	2166	3.4%
DISABILITY STATUS (noninstitutionalized) and percent of population						
5 to 15 years	1,409	1.4%	430	1.4%	412	0.6%
16 to 64 years	25,431	25.6%	9,375	31.0%	7,100	11.0%
65 years and over	9,274	9.3%	2,767	9.2%	11,624	18.1%
All ages 5 and over	36,114	36.3%	12,572	41.6%	19,136	29.7%

Data sources

Source: United States Census Bureau, Census 2000, Summary file 3 Sample Data,Tables QT-PL (Basic Facts), P8, P37, P41, P53, P88, PCT14
More detailed census information is available from the American Factfinder (factfinder.census.gov)
Data assembled by: Community Health Assessment, Planning and Evaluation group (CHAPE), Public Health Division, CCHS, August 2004

Common Causes of Death

Contra Costa and California

People living in Contra Costa are more likely than people living in California to die from cancer and stroke.

Heart disease, cancer, stroke, chronic lower respiratory disease and unintentional injury (accidents) are the five most common causes of death in both Contra Costa and California.

Over a three-year period 2000-2002, there were 20,531 deaths among Contra Costa residents. This means that there are approximately 6,844 deaths each year among people living in this county.

Contra Costa

The death rates from cancer and stroke are higher in Contra Costa (178.2 and 63.9 per 100,000) than California (171.8 and 57.5 per 100,000).

Table 7. The five most common causes of death. Contra Costa, 2000-2002

	Percent	(Number)	Rate[1]
1. Heart disease	27.4%	(5,624)	198.1
2. Cancer	24.5%	(5,037)	*178.2
3. Stroke	8.8%	(1,810)	*63.9
4. Chronic lower respiratory disease	5.4%	(1,116)	40.2
5. Unintentional injuries	3.2%	(666)	22.8

[*] Indicates that the death rate for this cause is significantly higher in Contra Costa than in California.
[1] Death rates are presented as age-adjusted rates (per 100,000) for heart disease, cancer, stroke and chronic lower respiratory disease, and as a crude rate (per 100,000) for unintentional injury. Chronic lower respiratory disease includes bronchitis, emphysema and asthma.

California

The death rates from heart disease and unintentional injuries are higher in California (220.1 and 26.9 per 100,000) than Contra Costa (198.1 and 22.8 per 100,000).

Table 8. The five most common causes of death. California, 2000-2002

	Percent	Rate[1]
1. Heart disease	29.7%	*220.1
2. Cancer	23.2%	171.8
3. Stroke	7.7%	57.5
4. Chronic lower respiratory disease	5.5%	41.6
5. Unintentional injuries	4.0%	*26.9

[*] Indicates that the death rate for this cause is significantly higher in California than in Contra Costa.
[1]Death rates are presented as age-adjusted rates (per 100,000) for heart disease, cancer, stroke and chronic lower respiratory disease, and as a crude rate (per 100,000) for unintentional injuries. Chronic lower respiratory disease includes bronchitis, emphysema and asthma.

Why are age-adjusted rates important?

An age-adjusted rate controls for differences in age and population size. An age-adjusted rate is the best summary statistic for comparing the impact of diseases like heart disease, cancer, stroke and chronic lower respiratory disease that are heavily influenced by age.

It is important to use age-adjusted rates for diseases that are influenced by age as the population of California is younger than the population of Contra Costa and there are many more people living in California than in Contra Costa.

An age-adjusted death rate is useful identifying differences that are due to environmental or behavioral risk factors instead of age. Contra Costa has a higher age-adjusted death rate from cancer compared to California. This means that the increased risk in Contra Costa is probably due to environmental or behavioral factors instead of age.

Why are crude rates important?

A crude rate controls for differences in population size and is a good summary statistic for comparing health outcomes like unintentional injury, which are less influenced by age, across groups of different size.

For unintentional injury, it is important to use crude rates as there are many more people living in California than in Contra Costa.

How to calculate the percentage and number of deaths

Percentages describe the proportion of deaths that occur from a particular cause. The percentage is calculated by dividing the number of deaths from a specific cause by the total number of deaths, and then multiplying that number by 100.

Numbers show the actual number of deaths from each cause over a three-year period. **The number of deaths per year can be calculated by dividing the total number of deaths from 2000-2002 by three**.

Confidence intervals are available
The differences highlighted above are statistically significant. This means that we are 95% certain that these differences are not due to chance.

You may download and view all detailed tables with 95% confidence intervals, at http://cchealth.org/health_data/hospital_council/

Data sources

Mortality data from the California Department of Health Services (CDHS), http://www.dhs.ca.gov/, Center for Health Statistics' Death Statistical Master File, 2000-2002. Any analyses, interpretations or conclusions of the data have been reached by CHAPE and are not from the CDHS.

Population data from the California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050, and E-4 Population Estimates for Cities, Counties, and the State, 2001-2004, with DRU Benchmark, available online at: http://www.dof.ca.gov/HTML/DEMOGRAP/Druhpar.htm. Sacramento, California, May 2004.

Note: City-level denominators were extrapolated from the E-4 file to approximate the mid-year city-level population estimates that are needed to calculate city-level rates. For more information, see our section on statistical methods.

ICD10 leading causes of death coding from the Centers for Disease Control and Prevention National Center for Health Statistics, available online at: http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_16.pdf.

Common Causes of Death – Adults and Young People

Deaths are much more common in the older population groups. Older residents most often die from chronic diseases such as heart disease and cancer. It is more common for younger residents to die from an injury.

Age 65+

Heart disease, cancer, stroke, chronic lower respiratory disease and influenza and pneumonia are the leading causes of death among Contra Costa residents age 65 and over.

Understandably, people age 65 and over have the highest risk of death and account for 75% of all deaths countywide. Over a three-year period 2000-2002, there were 15,336 deaths among Contra Costa residents age 65 and over. This means that there are approximately 5,112 deaths each year among older residents.

Table 9. Most common causes of death for residents age 65+. Contra Costa, 2000-2002

	Percent	(Number)	Rate
1. Heart disease	30.5%	(4,680)	1,422.9
2. Cancer	22.7%	(3,475)	1,056.6
3. Stroke	10.4%	(1,602)	487.1
4. Chronic lower respiratory disease*	6.4%	(980)	298.0
5. Influenza and pneumonia	3.7%	(561)	170.6

* Chronic lower respiratory disease includes bronchitis, emphysema and asthma. (Rates are per 100,000)

Age 45-64 years

Cancer, heart disease, unintentional injuries (accidents), stroke and chronic liver disease and cirrhosis are the leading causes of death among Contra Costa residents age 45-64 years.

People age 45-64 years account for 18% of all deaths countywide. Over a three-year period 2000-2002, there were 3,632 deaths among Contra Costa residents

between the ages of 45 and 64. This means that there are approximately 1,210 deaths each year among adults in this age group.

Table 10. Most common causes of death for residents age 45-64 years. Contra Costa, 2000-2002

	Percent	(Number)	Rate
1. Cancer	36.9%	(1,341)	188.3
2. Heart disease	22.4%	(815)	114.4
3. Unintentional injuries (accidents)	4.5%	(165)	23.2
4. Stroke	4.5%	(163)	22.9
5. Chronic liver disease and Cirrhosis	4.0%	(144)	20.2

(Rates are per 100,000)

Age 25-44 years

Unintentional injuries (accidents), cancer, heart disease, suicide and homicide are the leading causes of death among Contra Costa residents age 25-44 years.

People age 25-44 years have a much lower risk of dying and account for 5% of all deaths countywide. Between 2000 and 2002, there were 1,033 deaths among Contra Costa residents age 25-44 years. This means that there are approximately 345 deaths each year among adults in this age group.

Table 11. Most common causes of death for residents age 25-44 years. Contra Costa, 2000-2002

	Percent	(Number)	Rate
1. Unintentional injuries	19.1%	(197)	22.4
2. Cancer	18.1%	(187)	21.3
3. Heart disease	11.0%	(114)	13.0
4. Suicide	8.6%	(89)	10.1
5. Homicide	6.8%	(70)	8.0

(Rates are per 100,000)

Age 0-24 years

Unintentional injuries (accidents), perinatal conditions, homicide, congenital abnormalities and cancer are the leading causes of death among Contra Costa residents age 0-24 years.

Infants, children and young adults have a very low risk of death and account for 3% of all deaths countywide. Between 2000 and 2002, there were 529 deaths among Contra Costa residents age 0-24 years. This means that there are approximately 175 deaths each year among Contra Costa infants, children and young adults.

Perinatal conditions include health conditions such as birth trauma, infections and respiratory conditions originating in the perinatal period. Congenital abnormalities include health conditions such as anencephaly, spina bifida, down's syndrome and congenital malformations of the heart, circulatory system and respiratory system.

Table 12. Most common causes of death for residents age 0-24 years. Contra Costa, 2000-2002

	Percent	(number)	Rate
1. Unintentional injuries	24.4%	(129)	12.9
2. Perinatal conditions	15.9%	(84)	8.4
3. Homicide	13.6%	(72)	7.2
4. Congenital abnormalities	11.0%	(58)	5.8
5. Cancer	6.4%	(34)	3.4

(Rates are per 100,000)

Age-specific rates

Rates in this section are age-specific rates per 100,000 residents. An age-specific rate is a rate for a specific age group. When making comparisons between age groups, it is important to use age-specific death rates to account for the fact that the population is somewhat larger in the younger age groups and smaller in the older age groups.

How to calculate the percentage and number of deaths

Percentages describe the proportion of deaths in an age group that are due to each cause. The percentage is calculated by dividing the number of deaths in an age group that are due to a particular cause by the total number of deaths in that age group and multiplying that number by 100.

Numbers show the actual number of deaths from each cause over a three-year period. The number of deaths per year can be calculated by dividing the total number of deaths from 2000-2002, as shown in the tables, by three.

Data sources

Mortality data from the California Department of Health Services (CDHS), http://www.dhs.ca.gov/, Center for Health Statistics' Death Statistical Master File, 2000-2002. Any analyses, interpretations or conclusions of the data have been reached by CHAPE and are not from the CDHS.

Population data from the California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050, and E-4 Population Estimates for Cities, Counties and the State, 2001-2004, with DRU Benchmark, available online at: http://www.dof.ca.gov/HTML/DEMOGRAP/Druhpar.htm. Sacramento, California, May 2004.

Note: City-level denominators were extrapolated from the E-4 file to approximate the mid-year city-level population estimates that are needed to calculate city-level rates. For more information, please see our section on statistical methods.

ICD10 leading causes of death coding from the Centers for Disease Control and Prevention National Center for Health Statistics, available online at: http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_16.pdf.

Common Causes of Death – Race/Ethnicity

Heart disease, cancer and stroke are the leading causes of death in each of Contra Costa's race/ethnic groups. However, African Americans have higher death rates from each of these causes.

African Americans are more likely to die from heart disease, cancer, stroke, homicide and diabetes compared to the county as a whole.

Table 13. The five most common causes of death for African Americans. Contra Costa, 2000-2002

	Percent	(Number)	Rate[1]
1. Heart disease	26.8%	(592)	*319.8
2. Cancer	22.6%	(498)	*247.6
3. Stroke	8.7%	(191)	*104.4
4. Homicide	4.9%	(107)	*39.3
5. Diabetes	4.7%	(103)	*54.8

[*] Indicates that the death rate for this cause is significantly higher among African Americans compared to the county as a whole.
[1] Death rates are presented as age-adjusted rates (per 100,000) for heart disease, cancer, stroke and diabetes, and as a crude rate (per 100,000) for homicide.

As a smaller population group (9.2% of the county population) with high death rates from nearly every cause, African Americans account for 11% of all deaths countywide. Over a three-year period 2000-2002, there were 2,205 deaths among African Americans living in Contra Costa. This means that there are approximately 735 deaths each year among African Americans.

Whites have a lower death rate from stroke

Whites most often die from heart disease, cancer, chronic lower respiratory disease and influenza and pneumonia. Their death rates are similar to the county as a whole. However, Whites are less likely to die from stroke.

Table 14. The five most common causes of death for Whites. Contra Costa, 2000-2002

	Percent	(Number)	Rate[1]
1. Heart disease	28.2%	(4,434)	201.9
2. Cancer	24.8%	(3,895)	187.2
3. Stroke	8.6%	(1,352)	60.6
4. Chronic lower respiratory disease	6.1%	(954)	45.1
5. Influenza and pneumonia	3.1%	(486)	21.7

[1] Death rates are presented as age-adjusted rates (per 100,000) for heart disease, cancer, stroke, chronic lower respiratory disease and influenza and pneumonia. Chronic lower respiratory disease includes bronchitis, emphysema and asthma.

As the largest race/ethnic group in the county (58.0% of the county population), the majority of deaths in Contra Costa (76%) occur among Whites. Over a three-year period 2000-2002, there were 20,531 deaths among Whites living in Contra Costa. This means that there are approximately 6,845 deaths each year among Whites.

Latinos have a higher rate of diabetes death

Latinos are more likely to die from diabetes compared to the county as a whole. Latinos have lower death rates from heart disease, cancer, stroke and unintentional injuries.

Table 15. The five most common causes of death for Latinos. Contra Costa, 2000-2002

	Percent	(Number)	Rate[1]
1. Heart disease	22.0%	(284)	152.4
2. Cancer	21.7%	(280)	122.6
3. Stroke	9.0%	(116)	62.1
4.Unintentional injuries	6.5%	(84)	18.6
5. Diabetes	4.4%	(57)	*27.2

[*] Indicates that the death rate for this cause is significantly higher among Latinos compared to the county as a whole.
[1] Death rates are presented as age-adjusted rates (per 100,000) for heart disease, cancer, stroke and diabetes, and as a crude rate (per 100,000) for unintentional injuries.

As a population group (17.7% of the county population) with low death rates from nearly every cause, Latinos account for 6% of all deaths countywide. Between 2000 and 2002, there were 1,289 deaths among Latinos living in Contra Costa. This means that there are approximately 430 deaths each year among Latinos in this county.

Asians have lower death rates from chronic disease

Asians have death rates similar to the county as a whole from influenza and pneumonia, and lower death rates from cancer, heart disease, stroke and chronic lower respiratory disease.

Table 16. Five most common causes of death for Asians. Contra Costa, 2000-2002

	Percent	(Number)	Rate[1]
1. Cancer	28.4%	(337)	123.2
2. Heart disease	23.4%	(278)	122.8
3. Stroke	11.8%	(140)	63.6
4. Chronic lower respiratory disease	4.4%	(52)	24.9
5. Influenza and pneumonia	4.2%	(50)	23.6

[1] Death rates are presented as age-adjusted rates (per 100,000) for heart disease, cancer, stroke, chronic lower respiratory disease and influenza and pneumonia. Chronic lower respiratory disease includes bronchitis, emphysema and asthma.

As another smaller population group (10.8% of the county population) with low death rates from almost every cause, Asians account for 6% of all deaths countywide. Between 2000 and 2002, there were 1,186 deaths among Asians living in Contra Costa. This means that there are approximately 395 deaths each year among Asians in this county.

Why are age-adjusted rates important?

An age-adjusted rate controls for differences in age and population size. An age-adjusted rate is the best summary statistic for comparing the impact of diseases like heart disease, cancer, stroke, chronic lower respiratory disease, influenza and pneumonia and diabetes that are heavily influenced by age.

For example, the White population is older, and the Latino population is younger than the county as a whole. Without age-adjustment, we would expect to see higher death rates among Whites than among Latinos, and we would expect that these differences would be largely due to age. An age-adjusted rate calculates what the death rates would look like if the White and Latino populations had the same age distribution.

An age-adjusted death rate is useful identifying differences that are due to environmental or behavioral risk factors instead of age. Latinos have a higher age-adjusted death rate from diabetes compared to the county as a whole. This means that the increased risk among Latinos is probably due to environmental or behavioral factors instead of age.

Why are crude rates important?

A crude rate controls for differences in population size and is a good summary statistic for comparing health outcomes like homicide and unintentional injury, which are less influenced by age, across groups of different sizes.

For homicide and unintentional injury, it is important to use crude rates as there are many more Whites in the county than African Americans, Latinos or Asians.

How to calculate the percentage and number of deaths

Percentages describe the proportion of deaths that occur from a particular cause. The percentage is calculated by dividing the number of deaths from a specific cause by the total number of deaths, and then multiplying that number by 100.

Numbers show the actual number of deaths from each cause over a three-year period. **The number of deaths per year can be calculated by dividing the total number of deaths from 2000-2002 by three.**

Confidence intervals are available

The differences highlighted above are statistically significant. This means that we are 95% certain that these differences are not due to chance.

You may download and view all detailed tables with 95% confidence intervals, at http://cchealth.org/health_data/hospital_council/

Data sources

Mortality data from the California Department of Health Services (CDHS), http://www.dhs.ca.gov/, Center for Health Statistics' Death Statistical Master File, 2000-2002. Any analyses, interpretations or conclusions of the data have been reached by CHAPE and are not from the CDHS.

Population data from the California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050, and E-4 Population Estimates for Cities, Counties and the State, 2001-2004, with DRU Benchmark, available online at: http://www.dof.ca.gov/HTML/DEMOGRAP/Druhpar.htm. Sacramento, California, May 2004.

Note: City-level denominators were extrapolated from the E-4 file to approximate the mid-year city-level population estimates that are needed to calculate city-level rates. For more information, see our section on statistical methods.

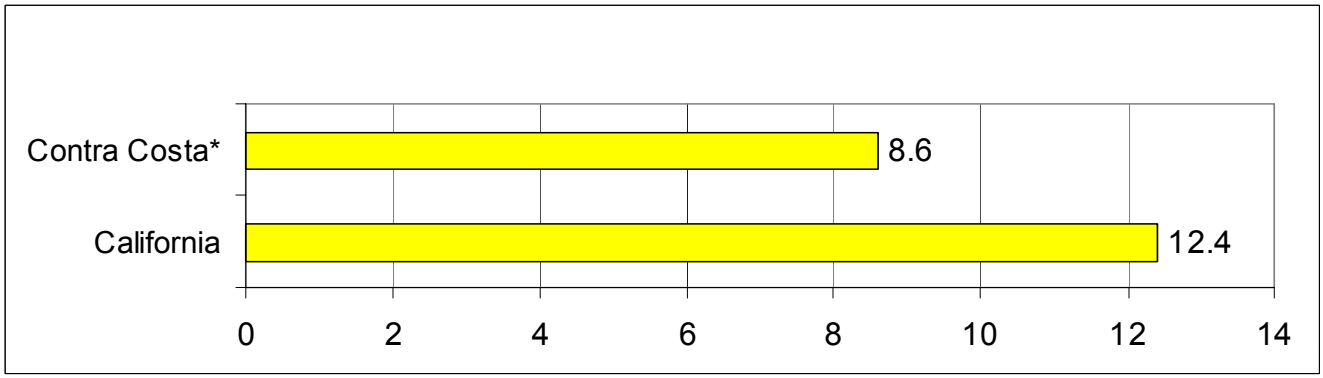
ICD10 leading causes of death coding from the Centers for Disease Control and Prevention National Center for Health Statistics, available online at: http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_16.pdf.

Health Concerns

AIDS

New AIDS cases unfairly burden African Americans and their communities.

Contra Costa has a significantly lower rate of recently diagnosed AIDS cases than California.



[*] Indicates that the rate per 100,000 of AIDS cases diagnosed betweeen 2000-2002 is significantly lower in Contra Costa than in California.

African Americans are more likely to be diagnosed with AIDS compared to the county as a whole.

Table 17. Residents diagnosed with AIDS by race. Contra Costa 2000-2002

	Rate	Number	Percent
African American	*37.4	108	43.2%
Latino/Hispanic	6.6	36	14.4%
White	5.9	98	39.2%
Asian/Pacific Islander	--	8	3.2%
Contra Costa:	**8.6**	**250**	**100.0%**

[*] Indicates that the crude diagnosis rate per 100,000 is significantly higher among African Americans compared to the county as a whole.
-- Due to small numbers (<20 deaths), rate could not be calculated for Asian/Pacific Islanders.

Historically, Whites have been the racial group with the largest number of cases, but now African Americans represent the largest number of new cases (108). Another group of concern is the Latino population, which has experienced a gradual increase in the number of AIDS cases.

People living in Richmond have higher rates of AIDS diagnosis compared to the county as a whole. Richmond residents account for nearly a third (30.8%) of recent diagnoses. Other cities that have more than 20 newly diagnosed AIDS cases include Concord (27) and Pittsburg (24).

Table 18. Residents diagnosed with AIDS by community. Contra Costa 2000-2002

	Rate	Number	Percent
Richmond	*25.5	77	30.8%
Pittsburg	13.6	24	9.6%
Concord	7.3	27	10.8%
Antioch	7.0	20	8.0%
Walnut Creek	--	19	7.6%
San Pablo	--	15	6.0%
Martinez	--	8	3.2%
Pinole	--	7	2.8%
Rodeo	--	7	2.8%
El Cerrito	--	6	2.4%
Oakley	--	6	2.4%
North Richmond	--	5	2%
Other Communities[1]	--	29	11.6%
Contra Costa:	**8.6**	**250**	**100.0%**

[*] Indicates that the crude diagnosisrate per 100,000 is significantly higher among people living in Richmond compared to the county as a whole.
-- Due to small numbers (<20 deaths), rates could not be calculated for these communities.
[1]Includes 14 additional communities with fewer than 5 cases each.

People age 25-44 years are more likely to be diagnosed with AIDS, and account for the majority (59.2%) of newly diagnosed AIDS cases. People age 45-64 years comprise over a third (33.2%) of recent diagnoses.

Table 19. Residents diagnosed with AIDS by age. Contra Costa 2000-2002

	Rate	Number	Percent
0-24yrs	--	8	3.2%
25-44yrs	*16.8	148	59.2%
45-64yrs	11.7	83	33.2%
65+	--	11	4.4%
Contra Costa:	**8.6**	**250**	**100.0%**

[*] Indicates that the crude diagnosis rate per 100,000 is significantly higher among residents age 25-44 years compared to the county as a whole.
-- Due to small numbers (<20 deaths), rates could not be calculated for these age groups.

Men make up 78.4% of newly diagnosed AIDS cases. This represents a total of 196 residents. From 2000 to 2002, a total of 54 Contra Costa women were diagnosed with AIDS, which is 21.6% of the County's recently diagnosed AIDS cases. While the number of new cases of men who have sex with men (MSM) with AIDS has dramatically dropped since 1992, the decrease in the number of new AIDS cases for women of color has been much slower, prompting concerns over whether women are receiving prevention messages.

Table 20. Residents diagnosed with AIDS by gender. Contra Costa 2000-2002

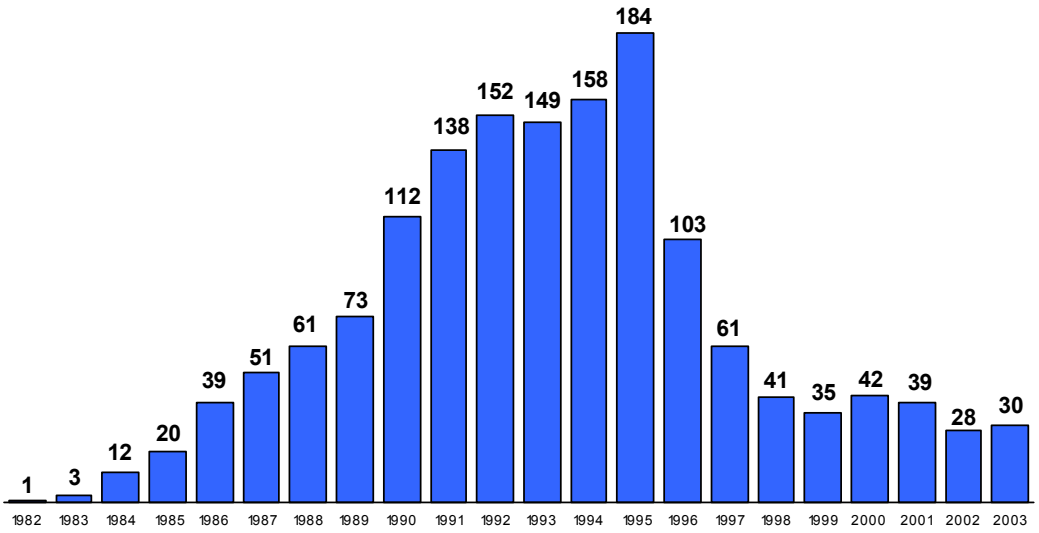
	Rate	Number	Percent
Male	*13.7	196	78.4%
Female	3.6	54	21.6%
Contra Costa:	**8.6**	**250**	**100.0%**

[*] Indicates that the crude diagnosis rate per 100,000 is significantly higher among men compared to the county as a whole.

The number of people being diagnosed with and dying from AIDS has declined consistently since 1996. This is due to several factors including improved medications, earlier access to treatment and care, and better trained physicians. Nowadays many residents are successfully managing their HIV infection and avoiding the medical complications identifiable by an AIDS diagnosis.

AIDS Deaths in Contra Costa

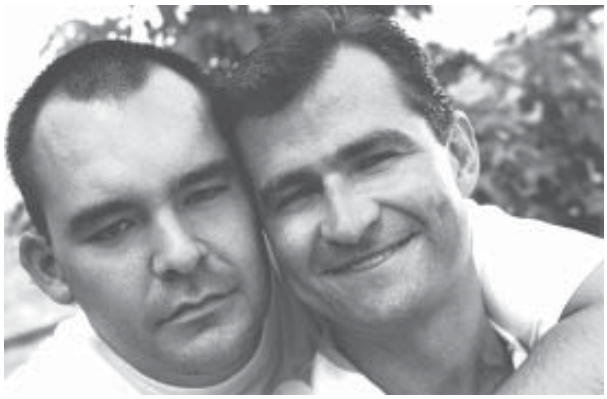
(as of 3/31/04)



Total Deaths = 1,538

2,483 Contra Costa Residents have been diagnosed with AIDS.

Through June 28, 2004 a cumulative (growing) total of 2,483 cases of AIDS have been reported to the Public Health Department. Currently, **there are 934 people living with AIDS (PLWA) in Contra Costa County**.



Men who have sex with men (MSM) and drug users are at greatest risk

Most of the Contra Costa residents who have been diagnosed with AIDS have been men who have sex with other men. Over time, there have been 1,432 Contra Costa men who have contracted the HIV/AIDS virus in this way.

Injection (needle) drug use was the method of HIV infection for 22.8% of county residents (559) with AIDS.

Women are mostly likely to be infected through injection (needle) drug use (49.6%) and sexual contact (40.8%.)

Table 21. **Method of infection for adult and teen AIDS cases**

	Total (#)		Men (#)		Women (#)	
Men who have sex with Men (MSM)	58.4%	(1,432)	69.4%	(1,432)	--	--
Heterosexual injection drug use	22.8%	(559)	17.8%	(367)	49.6%	(192)
Heterosexual contact	7.5%	(184)	1.3%	(26)	40.8%	(158)
MSM injection drug use	5.1%	(124)	6.0%	(124)	--	--
Transfusion with blood/blood product	1.9%	(46)	1.4%	(28)	4.7%	(18)
Hemophilia	0.7%	(18)	0.9%	(18)	0%	(0)
Unknown or not reported	3.6%	(88)	3.3%	(69)	4.9%	(19)
Total	100.0%	(2,451)	100.0%	(2,064)	100.0%	(387)

Total AIDS cases reported through 3/31/04

There have been 13 Contra Costa children diagnosed with AIDS

Most cases of AIDS in children are attributed to a parent who has contracted HIV/AIDS (76.9%). (Since the table below highlights very small numbers of children, the percentages could change with just a few of new cases.)

Table 22. **Method of infection for Childhood Cases**

	Total (#)		Males (#)		Females (#)	
Parent has HIV/AIDS (or at risk)	76.9%	(10)	62.5%	(5)	100.0%	(5)
Transfusion with blood/blood product	23.1%	(3)	37.5%	(3)	0	(0)
Total	100.0%	(13)	100.0%	(8)	100.0%	(5)

Total AIDS cases reported through 3/31/04

Many Residents are Diagnosed At Public Facilities

Over 40% (1,028) of the AIDS diagnoses occurred at publicly funded healthcare sites (like county clinics.)

AIDS cases reported among residents by healthcare provider.

	Cases
Public Hospital, Clinics & Services (Contra Costa)	885
Kaiser Permanente	575
Private Hospitals & Clinics (Other Counties)	331
Private Hospitals & Clinics (Contra Costa)	316
Private Practice Medical Doctors	233
Veteran's Affairs Hospitals & Clinics	83
Public Hospitals & Clinics (Other Counties)	60
Total	2,483

Total AIDS cases reported through 7/28/04
Confidence intervals are available

HIV infection

Human immunodeficiency virus (HIV) infection became reportable outcome in July, 2002. Data collected since 2002 suggest several continuing important trends. Among the male population, men who have sex with men (MSM) remain at the highest risk for HIV infection, followed by injection drug users. Women however, are most likely to contract HIV through heterosexual contact.

Data sources

In the analysis above, local data about AIDS diagnoses and Persons Living with AIDS (PLWA) is from the Contra Costa Health Services' Epidemiology, Surveillance and Health Data unit. Information about the number of cases at the State level is from the California Department of Health Services, Office of AIDS. Denominator data was derived from Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050, and E-4 Population Estimates for Cities, Counties, and the State, 2001-2004, with DRU Benchmark, available online at: http://www.dof.ca.gov/HTML/DEMOGRAP/Druhpar.htm. Sacramento, California, May 2004.

Many thanks to Contra Costa's Epidemiology and Surveillance Unit for providing data and select graphics included in this section.

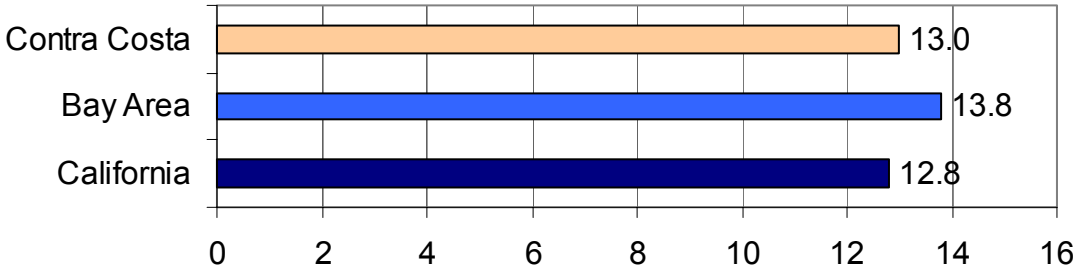
For more information about HIV and AIDS in Contra Costa, please contact Juan Reardon, MD, MPH, jreardon@hsd.co.contra-costa.ca.us , Director, Epidemiology, Surveillance and Health Data Unit, or Martin Lynch by phone at (925) 313-6323. "Contra Costa County HIV/AIDS Epidemiology Report" - May 2004 (959k PDF, 20pp) is available from their website at http://www.cchealth.org/groups/epidemiology/aids/.

For more information about content in this report, please email Contra Costa Health Services' Community Health Assessment, Planning and Evaluation (CHAPE) group at chape@hsd.co.contra-costa.ca.us , or call (925) 313-6171.

Childhood Asthma – Prevalence

American Indian and African American children are more likely to be diagnosed with asthma.

Figure 2. Percent of asthma diagnoses among children 0 - 14 years, 2001.



In terms of health disparities, American Indian/Alaska Native and African American children are more likely to be diagnosed with asthma compared to children in California as a whole.

Table 23. Asthma diagnoses among children age 0-14 years by race/ethnicity. California, 2001[1]

	Percent	Number
American Indian/ Alaska Native	*25.6%	8,000
African American	*20.1%	97,000
White	13.8%	434,000
Asian	12.4%	82,000
Latino	9.9%	269,000
California	**12.8%**	**925,000[2]**

[*] Indicates that American Indian/Alaska Native and African American children are significantly more likely to be diagnosed with asthma compared to children in California overall.

[1]Due to small numbers at the local level, race/ethnic estimates are presesnted for California as a whole.

[2]The California total also includes the 35,000 children from other single/two or more race groups that have been diagnosed with asthma. This is an ill-defined group and has been excluded from the analysis.

In California nearly half of the children who have been diagnosed with asthma are White (434,000). Smaller numbers of children diagnosed with asthma are Latino (269,000), African American (97,000), Asian (82,000) and American Indian/Alaska Native (8,000).

Asthma rates among children are growing

The number of new cases of asthma is increasing across the United States. We still don't know what causes asthma or how to cure it, but science shows us that asthma can be treated and controlled. Asthma is one of the leading causes of hospitalizations among children.

The national trends in asthma match those of California with African American children having the highest rate of asthma diagnosis followed by American Indian/ Alaskan Natives, Whites, Asians and Latinos.

What is asthma? How is it treated?

Asthma is a chronic disease of the lungs' airways that causes repeated and distressing episodes of wheezing, breathlessness, chest tightness and nighttime or early morning coughing. Asthma can be difficult to diagnose and to differentiate from other respiratory illnesses.

Risk factors for asthma include genetic predisposition and environmental exposures, such as houses/apartments with dust mites and air polluted with tobacco smoke.

Individual asthma management plans should be developed with a physician. Different people have different medical situations and specific triggers that start their attacks. The management plan should be guided by the severity of the person's asthma, the benefits and drawbacks of each treatment, and opportunities to reduce asthma triggers. In addition, families need to know what actions to take if they are faced with an asthma emergency. As people with asthma grow and change, their asthma also changes and their management plan needs to address those changes. Routine follow-up care is an integral part of good asthma management.

Using this data to improve community health

In order to reduce unfair health differences, it is important to target intervention to the groups of children that are most at risk for being diagnosed with asthma. In California, these are American Indian/Alaska Native and African American children.

In order to reduce the overall number of children with asthma (without regard to health disparities), it may be better to target interventions at the groups that have the highest number of children who have been diagnosed with asthma. In California, these are Whites, Latinos and African Americans.

Interventions to address childhood asthma could include developing strategies to reduce air pollution associated with diesel trucks, teaching children and parents how to recognize and respond to the symptoms of an asthma attack, or problem-solving around how to control common household triggers such as secondhand smoke, mold and pet hair.

Notes on interpreting the data

The race/ethnic differences that have been highlighted above are statistically significant. This means that we are 95% certain that these differences are not due to chance.

It is important to note that these statistics estimate the proportion of children who have been diagnosed with asthma rather than the proportion of children who actually have the disease.

The asthma statistics are generated from a telephone survey that asks questions to a randomly selected group of children and adolescents in Contra Costa and other counties in California.

These statistics are estimates and we expect that these estimates will be slightly different each time the survey is conducted. As such, we do not recommend using these estimates for evaluation purposes.

Confidence intervals are available
You may download and view all detailed tables with 95% confidence intervals, at…
http://cchealth.org/health_data/hospital_council/

Data sources

Local data about asthma among children from the California Health Interview Survey's AskCHIS data query system, copyright (c) 2003 the Regents of the University of California, all rights reserved, available online at http://www.chis.ucla.edu/.

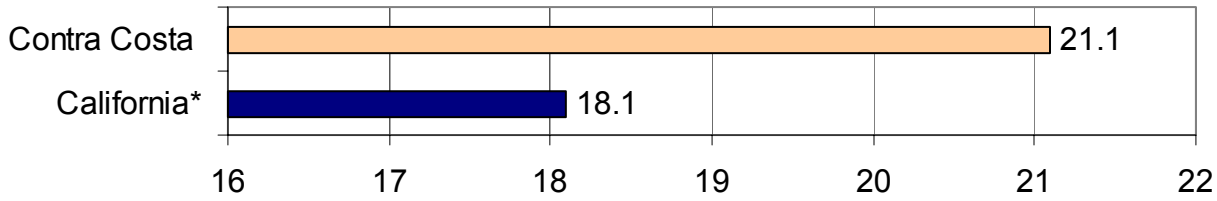
National data about asthma prevalence is from Summary Health Statistics for U.S. Children: National Health Interview Survey, 2002 U.S. Department of Health and Human Services, Centers for Disease Control and Prevention National Center for Health Statistics, March 2004, DHHS Publication No. (PHS) 2004-1549. This document is available online at http://www.cdc.gov/nchs/data/fastats/asthma.htm.

Childhood Asthma – Hospitalizations

Contra Costa children, particularly African American children, have a high rate of hospitalization for asthma

Children living in Contra Costa are more likely than children living in California to be hospitalized for asthma.

Figure 3. Asthma hospitalization rate, 1998 - 2000



[*] Indicates that the age-adjusted asthma hospitalization rate per 10,000 is significantly higher among children in Contra Costa compared to California.

Over the three-year period 1998-2000, there were 1,256 hospitalizations for asthma among Contra Costa children age 0-14 years. This means that **approximately 419 Contra Costa children are hospitalized for asthma each year**.

African American children have high rates of hospitalization for asthma

In Contra Costa, **African American children are hospitalized for asthma at a rate almost five times that of White children.**

Table 24. Hospitalization for asthma, children 0-14, by race/ethnicity. Contra Costa, 1998-2000

	Rate
African American	*62.7
Hispanic/Latino	15.5
Asian/Pacific Islander	13.8
White	12.9
Contra Costa	21.1

[*] Indicates that the age-adjusted asthma hospitalization rate per 10,000 among children is significantly higher for African Americans compared to the county as a whole.

Some communities have higher hospitalization rates for asthma

Children living in the Richmond and San Pablo zip codes of 94804, 94801, and 94806 are more likely to be hospitalized for asthma than those in other parts of the county.

Rates of asthma hospitalization among children living in Richmond and San Pablo range form 41.8 - 23.2 per 10,000, depending on the zip code.

Countywide, there are 21.1 asthma hospitalizations per 10,000 children. Rates in other zip codes range from a high of 21.7 per 10,000 in the Concord zip code of 94520 to a low of 6.6 per 10,000 in the Walnut Creek zip code of 94598.

Table 25. Zip codes with the highest rates of childhood asthma hospitalizations.

Zip code	Rate
94804	*41.8
94801	*39.7
94806	*39.6
94803	31.4
94805	23.2
Countywide	21.1

[*] Indicates that the age-adjusted asthma hospitalization rate per 10,000 among children age 0 - 14 years is significantly higher in the 94804, 94801 and 94806 zip codes compared to the county overall.

Rates per 10,000 in other Contra Costa communities range from 21.7 - 15.2 in Concord, 21.3 in Pittsburg and Bay Point, 18.3 in Antioch and Martinez, 15.3 in Oakley, 12.8 in Pinole, 11.5 - 6.6 in Walnut Creek, and 7.5 in Brentwood.

Using this data to plan interventions

In order to reduce health differences, it is important to target the groups with the highest rates of hospitalization and improve their access to outpatient care. For childhood asthma, these are African American children, and children living in Richmond and San Pablo.

Interventions to address childhood asthma could include teaching children and parents how to recognize and respond to the symptoms of an asthma attack, or problem-solving around how to control common household triggers such as secondhand smoke, mold and pet hair.

Why are age-adjusted rates important?

An age-adjusted rate controls for differences in age and population size. An age-adjusted rate is the best summary statistic for comparing the impact of diseases, like asthma, that are influenced by age. The age-adjusted hospitalization rate is useful **identifying differences that are due to poor access to health care or environmental and behavioral risk factors** instead of age. (See the Methods section at the back of this report for more information about using rates.)

The differences highlighted above are statistically significant. This means that we are 95% certain that these differences are not due to chance.

Interpreting this data

The above statistics present the rate of asthma hospitalization per 10,000 children. The statistics are based on all hospital discharges in which asthma was the primary diagnosis. They do not include treatment that takes place in a doctor's office, health clinic, or emergency room. A single child can be counted multiple times for multiple asthma hospitalizations.

The statistics indicate that some groups and communities are more likely to be hospitalized for asthma compared to the county as a whole. They do not tell us whether the increased risk is due to a large proportion of children being hospitalized for asthma, or to frequent asthma hospitalizations among certain subpopulations in that group or community.

ZIP code boundaries

We selected the ZIP codes that "best fit" for each of the communities listed above. For this analysis, the ZIP codes are as follows: Antioch (94509 and 94531), Brentwood (94513), Concord (94518, 94519, 94520 and 94521), Martinez (94553), Oakley (94561), Pinole (94564), Pittsburg and Bay Point (94565), Richmond and San Pablo (94801, 94803, 94804, 94805 and 94806) and Walnut Creek (94595, 94596, 94598). Due to shared ZIP codes, the communities of Pittsburg and Bay Point, and Richmond and San Pablo, were combined.

Data sources

Hospitalization data from Stockman JK, Shaik N, Von Behren J, Bembom O, Kreutzer R. California County Asthma Hospitalization Chart Book: Data from 1998-2000. Oakland, CA: California

Hospitalization data by community from Community Action to Fight Asthma, an Initiative of the California Endowment. Asthma Hospitalization Rates by Zip Code Tabulation Area For Selected California Communitites: Bay Area, 1998-2000.

National data about asthma prevalence is from **Summary Health Statistics for U.S. Children: National Health Interview Survey**, 2002 U.S. Department of Health and Human Services, Centers for Disease Control and Prevention National Center for Health Statistics, March 2004, DHHS Publication No. (PHS) 2004-1549. This document is available online at http://www.cdc.gov/nchs/data/fastats/asthma.htm.

Low Birth Weight Infants

African American mothers are almost twice as likely to have babies who are underweight.

There are approximately 851 low birth weight babies each year.
From 2000 to 2002, there was an average of 13,220 live births per year in Contra Costa County; of these, 6.4% were low birth weight.

Table 26. Low Birth Weight, percent and number by race/ethnicity, Contra Costa, 2000-2002

	Percent	(Number)
African American	*11.5%	(446)
Asian/Pacific Islander	*7.8%	(416)
White	5.9%	(1,034)
Latino	5.1%	(586)
Contra Costa	**6.4%**	**(2,552)**

[*] Indicates that the percentage of low birth weight is significantly higher in these groups compared to Contra Costa as a whole.

African Americans have the highest levels of low birth weight (11.5%). In general, rates of low birth weight were lowest among Hispanic/Latinos (5.1%), then Whites (5.9%), followed by Asian/ Pacific Islanders (7.8%).

Asian/Pacific Islanders have shown increasing rates over the years, significantly higher than the county average (6.4%), Whites and Hispanic/Latinos.

The greatest numbers of low birth weight infants were White (1034), followed by Latino (586).

At least six communities have rates of low birth weight infants that are too high

The following communities have statistically higher rates of low birth weight compared to the Healthy People 2010 objective for low birth weight of 5%: Richmond (7.7%), Pittsburg (7.4%), San Pablo (7.1%), Martinez (6.7%), Antioch (5.8%), and Concord (5.8%). The rate of low birth weight in Contra Costa (6.4%) was also significantly higher than the 2010 objective of 5%. It is important to note that only Richmond showed a statistically greater rate than the county average.

Communities with the greatest number of low birth weight babies: Richmond (394), Concord (311), Antioch (268), and Pittsburg (240) for the 3-year period 2000-2002.

Table 27. Low Birth Weight, percent and number, Selected communities, Contra Costa, 2000-2002

	Percent	(Number)
Richmond	*7.7%	(394)
Pittsburg	7.4%	(240)
San Pablo	7.1%	(170)
Martinez	6.7%	(99)
Pinole	6.4%	(39)
Oakley	6.2%	(74)
Walnut Creek	6.0%	(136)
Concord	5.8%	(311)
Antioch	5.8%	(268)
Bay Point	5.7%	(65)
Brentwood	4.6%	(72)
Contra Costa	**6.2%**	**(2,552)**

[*] Indicates that the percentage of low birth weight is significantly higher in these communities compared to Contra Costa as a whole.

The race of low birth weight infants differs by community

The number of low birth weight births was by far highest among African Americans in Richmond, with 206 low birth weight babies born from 2000-2002 representing 46% of Contra Costa County's African American low birth weight babies.

African American mothers in Martinez, Pittsburg, Richmond and San Pablo had significantly higher rates than the County average. (Although Brentwood had the second highest rate, it was not statistically greater than the County average because of the small number of both low birth weight babies in this community.)

The rate of low birth weight births among **Whites** was highest in San Pablo and Richmond (although neither showed statistically significant differences when compared to the County average). Greatest numbers were in Concord, Antioch and Walnut Creek.

The rate of low birth weight births among **Hispanic/Latinos** was highest in Pinole and Oakley (although neither showed statistically significant differences when compared to the County average). Greatest numbers were in Richmond, Concord and Antioch.

The rate of low birth weight births among **Asian/Pacific Islanders** was highest in Martinez and Walnut Creek (although only Walnut Creek showed a statistically significant difference when compared to the County average). Greatest numbers were in Concord, Walnut Creek, followed by Richmond and San Pablo - both tying for third.

What is low birth weight?

Infants weighing less than 2,500 grams (5 lbs 8 oz) are considered low birth weight. A healthy weight provides the baby's body with the strength it needs for survival. Levels of low birth weight are defined as the percentage of total births in a given population that are low birth weight.

Low birth weight infants are at high risk of illness, death and lasting health problems. For example, low birth weight babies need more intensive hospital care for problems such as respiratory illness or immaturity, which are often associated with infant death.

How to calculate the percentage and number of low birth weight infants

Percentages describe the proportion of low birth weight babies within a particular race/ethnic group, community or county.

The percentage is calculated by dividing the number of low birth weight infants that occur within a specific race/ethnic group, community or county by the total number of births in the county, then multiplying by 100.

Multi-racial or other categories were not included in this analysis due to small numbers.

The numbers show the actual number of low birth weight births over a three-year period.

Babies are more likely to be underweight if the mother:

- has high blood pressure or experiences lots of stress
- is older or very young
- had a short time period between pregnancies, or if the baby is born too early
- is pregnant with twins or triplets, or has had small infants before
- has not gained enough weight or was underweight before she became pregnant
- smokes or uses other substances that inhibit the baby's growth

Confidence intervals are available
You may download and view all detailed tables with 95% confidence intervals, at http://cchealth.org/health_data/hospital_council/

Data Sources

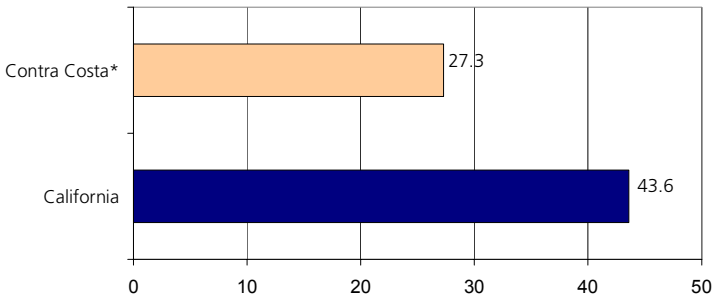
In the analysis above, local data about low birth weight is derived from our Contra Costa County's Automated Vital Statistics System or AVSS, using information from birth certificates.
Statistics prepared by Contra Costa Health Services' Community Health Assessment, Planning & Evaluation Group: 7/04. Any analyses, interpretations or conclusions of the data, unless specified, have been reached by the author and are not from the CA Department of Health Services, Center for Health Statistics or the local AVSS registrar.

For more information see Maternal, Child & Adolescent Health in Contra Costa County: 1991-1999 at http://www.cchealth.org/fmch or call Contra Costa's Community Health Assessment, Planning & Evaluation (CHAPE) Group at (925) 313-6171.

Births - Teen

Hispanic and African American girls are more likely to have babies as teenagers.

Figure 4. Contra Costa and California, Births to Teens, 2000-2002



[*] Indicates that the teen birth rate is significantly lower in Contra Costa than in California (The definition of teen birth rate is described later in this section.)

Hispanic (57.8 per 1,000) and African American girls (49.7 per 1,000) between 15 and 19 years old in Contra Costa have significantly higher birth rates compared to the county overall.

Table 28. Birth rate, percent, and number of births among girls (15-19) by race/ethnicity, Contra Costa, 2000-2002

	Rate	%	(Number of births)
Latino	*57.8	50%	(1,303)
African American	*49.7	21%	(560)
Asian/Pacific Isl.	15.0	7%	(189)
White	12.0	22%	(574)
Contra Costa	**27.3**	**100%**	**(2,697)**

[*] Indicates that the teen birth rate is significantly higher in groups identified compared to Contra Costa as a whole.

San Pablo, Richmond and Pittsburg have higher teen birth rates

Some communities have significantly higher rates of births to teens than the county as a whole: San Pablo (81.7), Richmond (67.0), Pittsburg (53.4), Bay Point (50.9), Oakley (36.8) and Antioch (36.7).

Table 29. Birth rate, percent, and number of births among girls (15-19) Selected communities, Contra Costa, 2000-2002

	Rate	Percent	(Number of Births)
San Pablo	*81.7	11%	(285)
Richmond	*67.0	26%	(652)
Pittsburg	*53.4	15%	(367)
Bay Point	*50.9	5%	(126)
Oakley	*36.8	4%	(106)
Antioch	*36.7	16%	(404)
Brentwood	32.9	3%	(86)
Concord	29.0	14%	(342)
Pinole	17.8	1%	(36)
Martinez	17.1	2%	(59)
Walnut Creek	6.4	1%	(27)
Contra Costa	**27.3**	**100%**	**(2,697)**

[*] Indicates that the teen birth rate is significantly higher in these communities compared to Contra Costa as a whole for this same group.

The five communities with greatest numbers

Richmond has the greatest number of teen births (652), followed by Antioch (404), Pittsburg (367), Concord (342) and San Pablo (285), for the 3-year period 2000-2002.

Teen pregnancies can lead to other problems

Infants born to teens are more likely to be born with low birth weight and suffer from related health problems. Also, when teenagers become parents, it may be more difficult for them to achieve educational goals, find sustainable and productive work and to be self-sufficient.

A teen age girl is more likely to have a baby if:

- She is low income and/or she has dropped out of school early
- She does not have access to or use family planning or medical services
- She became sexually active at a young age
- She or a sister has already had a baby or pregnancy as a teenager

How to calculate the rates

A rate controls for differences in population size and is a good summary statistic for comparing births to teens across groups of different sizes.

The rate is calculated by dividing the number of babies born to girls (ages 15-19) that occur within a specific race/ethnic group, community or countywide, by the total number of girls (ages 15-19) for that population, multiplied by 1,000. (Not by 100,000 like most other rates in this report).

The numbers show the actual number of births to teen girls (15-19) for a three-year period.

Contra Costa residents recorded as Multi-racial or "other" are not included in this analysis due to their small numbers.

Confidence intervals are available
You may download and view all detailed tables with 95% confidence intervals, at…
http://cchealth.org/health_data/hospital_council/

Data Sources

In the analysis above, local data about births to teens is derived from our Contra Costa County's Automated Vital Statistics System or AVSS, using information from birth certificates. Denominator data was derived from Department of Finance estimates.

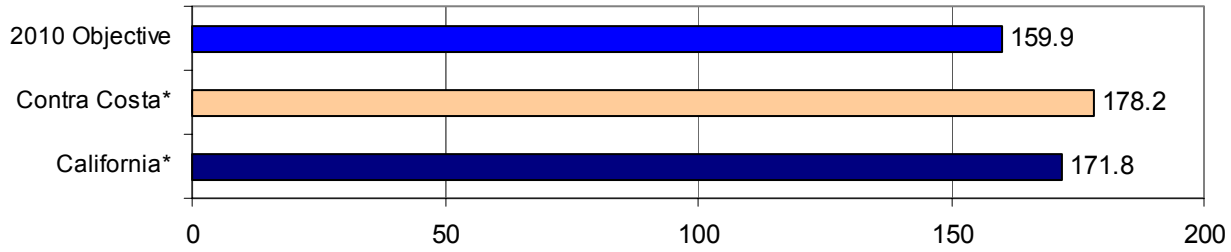
Statistics prepared by Contra Costa Health Services' Community Health Assessment, Planning & Evaluation Group: 7/04. Any analyses, interpretation, or conclusions of the data, unless specified, have been reached by the author and are not from the CA Department of Health Services, Center for Health Statistics or the local AVSS registrar.

For more information see Maternal, Child & Adolescent Health in Contra Costa County: 1991-1999 at http://www.cchealth.org/fmch or call Contra Costa's Community Health Assessment, Planning & Evaluation (CHAPE) Group at (925) 313-6171.

Cancer – All Types

Contra Costa has not met the Healthy People 2010 objective of reducing the age-adjusted death rate from cancer to no more than 159.9 deaths per 100,000 residents.

Figure 5. Age-adjusted death rates from cancer



[*] Indicates that the age-adjusted death rates per 100,000 for Contra Costa and California are significantly higher than the 2010 Objective. Contra Costa and California statistics were calculated for the three-year period 2000-2002.

Cancer is the second leading cause of death

In Contra Costa, cancer accounts for 25% of all deaths. Over a three-year period 2000-2002, there were 5,037 Contra Costa residents who died of cancer. This means that **approximately 1,675 Contra Costa residents die from cancer each year**.

The age-adjusted death rate from cancer is higher in Contra Costa (178.2 per 100,000) than California (171.8 per 100,000).

People living in San Pablo, Oakley, Martinez, Brentwood and Richmond, as well as African Americans and men, are more likely to die from cancer compared to the county overall. These differences are not due to the age of the population and are likely due to physical or social environmental risks, unhealthy behaviors or inadequate access to health services.

Some communities have higher rates of cancer deaths

Residents of San Pablo, Oakley, Martinez, Brentwood and Richmond are more likely to die from cancer compared to the county overall.

Table 30. Cancer deaths in selected communities. Contra Costa, 2000-2002

	Rate	Percent	(Number)
San Pablo	*321.3	4%	(219)
Oakley	*273.0	2%	(105)
Martinez	*254.6	5%	(248)
Brentwood	*216.0	3%	(131)
Richmond	*215.8	11%	(549)
Bay Point	207.4	2%	(78)
Walnut Creek	194.2	15%	(775)
Concord	185.4	12%	(620)
Antioch	185.3	7%	(360)
Pittsburg	185.1	5%	(236)
Pinole	175.8	2%	(111)
Contra Costa:	**178.2**	**100%**	**(5,037)**

[*] Indicates that the age-adjusted death rate per 100,000 is significantly higher for people living in these communities compared to Contra Costa as a whole.

The greatest number of the deaths from cancer occurs among people living in Walnut Creek (775, 15%), followed by people living in Concord (620, 12%), Richmond (549, 11%), Antioch (360, 7%), Martinez (248, 5%) and Pittsburg (236, 5%).

There are unfair racial differences in cancer deaths

African Americans are more likely to die from cancer compared to Contra Costa as a whole. Asians and Latinos are less likely to die from cancer compared to the county as a whole.

Table 31. Cancer deaths by race/ethnicity. Contra Costa, 2000-2002

	Rate	Percent	(Number)
African American	*247.6	10%	(498)
White	187.2	77%	(3,895)
Asian	123.2	7%	(337)
Latino	122.6	6%	(280)
Contra Costa:	**178.2**	**100%**	**[1](5,037)**

[*] Indicates that the age-adjusted death rate per 100,000 is significantly higher among African Americans compared to Contra Costa as a whole.
[1]The Contra Costa total also includes the 27 deaths that occurred among people from other race/ethnic groups such as Native American and Alaska Natives, Native Hawaiians and Pacific Islanders and people from two or more race groups. Due to small numbers (<20 deaths), rates could not be calculated for these groups.

The greatest number of deaths from cancer occur among Whites (3,895, 77%), **followed by African Americans** (498, 10%), Asians (337, 7%) and Latinos (280, 6%).

Men are more likely to die of cancer

Men have significantly higher death rates compared to the county as a whole.

Table 32. Cancer deaths by gender. Contra Costa, 2000-2002

	Rate	Percent	(Number)
Men	*205.4	48%	(2,412)
Women	161.4	52%	(2,625)
Contra Costa:	**178.2**	**100%**	**(5,037)**

[*] Indicates that the age-adjusted death rate is significantly higher among men compared to Contra Costa as a whole.

Though men are more likely to die from cancer, **over half of the deaths** (2,625) **from cancer occur among women** because there are more women in our senior population. Prevention and early treatment are important.

Cancer is a large group of diseases

For most types of cancer, abnormal cells form a lump or mass called a tumor. If cells from the tumor break away and travel to other parts of the body, they can continue to grow and damage the surrounding tissues and organs.

If the spread of abnormal cells is not controlled or checked, it can result in death. However, **many cancers can be cured through early detection and prompt treatment**.

Nationally, **African Americans are about 34% more likely to die from cancer than Whites**, and more than two times more likely to die from cancer than Asian/ Pacific Islanders, American Indians, and Latino. Racial and ethnic minorities tend to receive lower quality health care than Whites do. Access to good medical care is crucial to cancer survival.

Cancer is a chronic disease that is heavily influenced by age. This means that people become much more likely to develop and die from cancer as they get older. We have no control over some of the risk factors for cancer such as age or family history of cancer. We do have control over other important risk factors including cigarette smoking, diet and exercise. Many cancers can be prevented through lifestyle changes.

Using this data to improve community health

In order to reduce unfair health differences, it is important to target the groups with the highest age-adjusted death rates. For cancer, these are people living in San Pablo, Oakley, Martinez, Brentwood, and Richmond, and African Americans and men.

In order to reduce the overall number of deaths in the county (without regard to health disparities) it may be better to target interventions to the group that accounts for the greatest number of deaths from a given cause. For cancer, these are Whites, African Americans, and people living in Walnut Creek, Concord and Richmond.

Access to routine medical screenings and care is important to good health. Many Contra Costa residents diagnosed with chronic diseases like cancer can keep getting sicker when they lack health insurance, transportation or sufficient English skills to navigate health care systems. Providing culturally competent and accessible heath care to all residents will be key to lowering the county's death rates.

Because a person's risk for developing or dying from a chronic disease like cancer increases with age, it is important to target ongoing environmental and behavioral interventions to the young and middle-aged, in addition to older populations. Examples could include strategies to control environmental toxins, limit youth access to cigarettes, increase community access to fruits and vegetables, or educate people about the importance of regular screenings.

Why are age-adjusted rates important?

An age-adjusted rate controls for differences in age distribution and population size. An age-adjusted rate is the best summary statistic for comparing the impact of chronic diseases, like cancer, that are heavily influenced by age.

For example, the White population is older and the Latino population is younger than the county as a whole. Without age-adjustment, we would expect to see higher death rates among Whites than among Latinos, and we would expect that these differences would be largely due to age. An age-adjusted rate calculates what the death rates would look like if the White and Latino populations had the same age distribution. The age-adjusted death rate is useful in **identifying differences that are due to poor access to health care or environmental and behavioral risk factors** instead of age. (See the Methods section at the back of this report for more information about using rates.)

The differences highlighted above are statistically significant. This means that we are 95% certain that these differences are not due to chance.

How to calculate the percent and number of deaths

Percentages describe the proportion of countywide deaths from cancer that occur within a particular community, race/ethnic group or gender. The percentage is calculated by dividing the number of deaths that occur within a specific community, race/ethnic group or gender by the total number of deaths countywide and then multiplying that number by 100.

Numbers show the actual number of deaths from each cause over a three-year period. The number of deaths per year can be calculated by dividing the total number of deaths from 2000-2002, as shown in the tables, by three.

Confidence intervals are available
You may download and view all detailed tables with 95% confidence intervals, at http://cchealth.org/health_data/hospital_council/

Data sources

Mortality data from the California Department of Health Services (CDHS), http://www.dhs.ca.gov/, Center for Health Statistics' Death Statistical Master File, 2000-2002. Any analyses, interpretations or conclusions of the data have been reached by CHAPE and are not from the CDHS.

Population data from the California Department of Finance, Race/ Ethnic Population with Age and Sex Detail, 2000-2050, and E-4 Population Estimates for Cities, Counties, and the State, 2001-2004, with DRU Benchmark, available online at: http://www.dof.ca.gov/HTML/DEMOGRAP/Druhpar.htm. Sacramento, California, May 2004.
Note: City-level denominators were extrapolated from the E-4 file to approximate the mid-year city-level population estimates that are needed to calculate city-level rates. For more information, please see our section on statistical methods.

ICD10 coding for malignant neoplasms (ICD C00-C97) from the Centers for Disease Control and Prevention National Center for Health Statistics, available online at: http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_16.pdf.

Healthy People 2010 objectives from the US Department of Health and Human Services' Office of Disease Prevention and Health Promotion, available online at http://www.healthypeople.gov/.

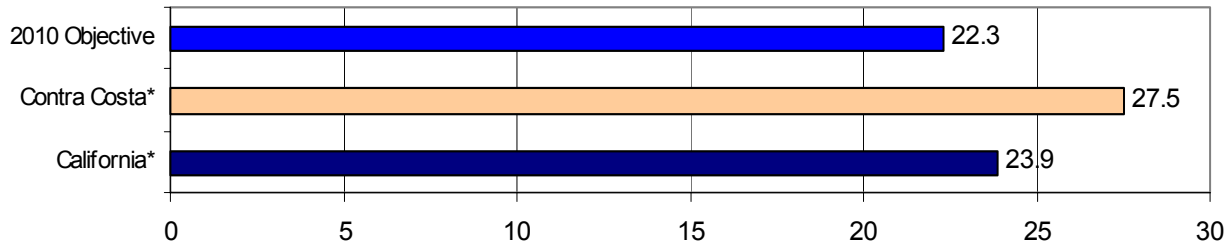
Information about how cancer affects the body, and risk factors for cancer from the Alameda County Public Health Department's Community Assessment, Planning, and Education (CAPE) unit's Alameda County Health Status Report 2003, available online at http://www.co.alameda.ca.us/PublicHealth/index.htm.

Information about national health disparities from Landis, SH; Murray, T; Bolden, S; et al. Cancer statistics, 2000. CA: A Cancer Journal for Clinicians 50 (1):2398-2424, 2000.

Cancer – Breast

Contra Costa has not met the Healthy People 2010 objective of reducing the age-adjusted death rate from breast cancer to no more than 22.3 deaths per 100,000 women.

Figure 6. Age-adjusted death rates from breast cancer among women



[*] Indicates that the age-adjusted death rates (per 100,000) for Contra Costa and California are significantly higher than the 2010 Objective. Contra Costa and California statistics were calculated for the three-year period 2000-2002.

Breast cancer is the second leading cause of cancer death among women

In Contra Costa, breast cancer accounts for 9% of all cancer deaths, and 17% of the cancer deaths among women. Over a three-year period 2000-2002, there were 451 Contra Costa women who died of breast cancer. This means that **approximately 150 Contra Costa women die from breast cancer each year**.

The age-adjusted **death rate from breast cancer is higher among women living in Contra Costa** (27.5 per 100,000) **than in California** (23.9 per 100,000).

Breast cancer impacts all Contra Costa communities

From the local data, it appears that the age-adjusted death rate from breast cancer is similar in many communities throughout Contra Costa. Local numbers are often too small to detect statistically significant differences by community.

Table 33. Women dying from breast cancer in selected communities. Contra Costa, 2000-2002

	Rate	Percent	(Number)
Martinez	46.0	6%	(26)
Walnut Creek	31.3	16%	(70)
Richmond	30.8	10%	(46)
Pittsburg	26.5	4%	(20)
Concord	26.2	11%	(51)
Antioch	23.3	6%	(28)
Contra Costa	27.5	100%	(451)

Due to small numbers (<20 deaths), age-adjusted rates per 100,000 women could not be calculated for Bay Point, Brentwood, Oakley, Pinole or San Pablo.

A large number of the deaths from breast cancer occur among women living in Walnut Creek (70 deaths, 16% of all the deaths from breast cancer), followed by women living in **Concord** (51, 11%), **Richmond** (46, 10%), **Antioch** (28, 6%) and **Martinez** (26, 6%).

Women of all races are affected by breast cancer death

.

In Contra Costa, it appears the age-adjusted death rate from breast cancer may be similar among African American and White women and lower among Asian women compared to the county as a whole. Again, the local numbers are too small to be certain of differences between the race/ethnic groups.

Table 34. Women's deaths from breast cancer by race/ethnicity. Contra Costa, 2000-2002

	Rate	Percent	(Number)
African American	36.8	10%	(47)
White	30.7	80%	(359)
Asian	13.8	5%	(24)
Latina	--	5%	(18)
Contra Costa	**27.5**	**100%**	**[1](451)**

-- Due to small numbers (<20 deaths), age-adjusted rates per 100,000 women could not be calculated for Latinas.
[1]The Contra Costa total also includes the 3 deaths that occurred among women from other race/ ethnic groups such as Native American and Alaska Natives, Native Hawaiians and Pacific Islanders and people from two or more race groups. Due to small numbers (<20 deaths), rates could not be calculated for these groups.

The majority of deaths from breast cancer occur among Whites (359, 80%), **followed by African Americans** (47, 10%), **Asians** (24, 5%) and **Latinas** (18, 5%).

Contra Costa has a higher rate of breast cancer deaths compared to California or the United States

The age-adjusted death rate for women with breast cancer is 23.9 per 100,000 in California and 24.9 nationally. In the United States, White women are most likely to get breast cancer, and African American women are the most likely to die of breast cancer, often because they are diagnosed at a later stage of the disease.

Breast cancer is a chronic disease that is heavily influenced by age. This means that **women become much more likely to develop and die from breast cancer as they get older**.

Using this data to improve community health

In order to reduce unfair health differences, it is important to target the groups with the highest age-adjusted death rates from a given cause. In this analysis, there was no race/ethnic group or community that had a higher age-adjusted death rate compared to the county as a whole, **even though national statistics tell us that African American women are the most likely to die from breast cancer**.

In order to reduce the overall number of deaths in the county (without regard to health disparities), it may be better to target interventions to the group that accounts for the highest percentage of deaths from a given cause. For breast cancer, these are White and African American women, as well as women living in Walnut Creek, Concord and Richmond.

Access to routine medical screenings and care is important to good health. Many Contra Costa residents diagnosed with chronic diseases, like breast cancer, can keep getting sicker when they lack health insurance, transportation or sufficient English skills to navigate health care systems. Providing culturally competent and accessible heath care to all residents will be key to lowering the county's death rates.

Because a person's risk for developing or dying from a chronic disease like breast cancer increases as they age, it is important to target ongoing environmental and behavioral interventions to the young and middle-aged, in addition to older populations. Examples could include strategies to limit youth access to cigarettes, increase community access to fruits and vegetables or educate people about the importance of regular screenings.

Why are age-adjusted rates important?

An age-adjusted rate controls for differences in age and population size. An age-adjusted rate is the best summary statistic for comparing the impact of chronic diseases, such as breast cancer, that are heavily influenced by age.

For example, the White population is older and the Latino population is younger than the county as a whole. Without age-adjustment, we would expect to see higher death rates among Whites than among Latinos, and we would expect that these differences would be largely due to age. An age-adjusted rate calculates what the death rates would look like if the White and Latino populations had the same age distribution. The age-adjusted death rate is useful in identifying differences that are due to poor access to health care or environmental and behavioral risk factors instead of age. (See the Methods section at the back of this report for more information about using rates.)

The differences highlighted above are statistically significant. This means that we are 95% certain that these differences are not due to chance.

How to calculate the percentage and number of deaths

Percentages describe the proportion of countywide deaths from breast cancer that occur within a particular community or race/ethnic group. The percentage is calculated by dividing the number of deaths that occur within a specific community or race/ethnic group by the total number of deaths countywide and multiplying that number by 100.

The numbers show the actual number of deaths from each cause over a three-year period. The number of deaths per year can be calculated by dividing the total number of deaths from 2000-2002, as shown in the tables, by three.

Confidence intervals are available
You may download and view all detailed tables with 95% confidence intervals, at http://cchealth.org/health_data/hospital_council/

Data sources:

Mortality data from the California Department of Health Services (CDHS), http://www.dhs.ca.gov/, Center for Health Statistics' Death Statistical Master File, 2000-2002. Any analyses, interpretations or conclusions of the data have been reached by CHAPE and are not from the CDHS.

Population data from the California Department of Finance, Race/ Ethnic Population with Age and Sex Detail, 2000-2050, and E-4 Population Estimates for Cities, Counties, and the State, 2001-2004, with DRU Benchmark, available online at: http://www.dof.ca.gov/HTML/DEMOGRAP/Druhpar.htm. Sacramento, California, May 2004.
Note: City-level denominators were extrapolated from the E-4 file to approximate the mid-year city-level population estimates that are needed to calculate city-level rates. For more information, please see our section on statistical methods.

ICD10 coding for malignant neoplasm of breast (ICD C50) from the Centers for Disease Control and Prevention National Center for Health Statistics, available online at: http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_16.pdf.

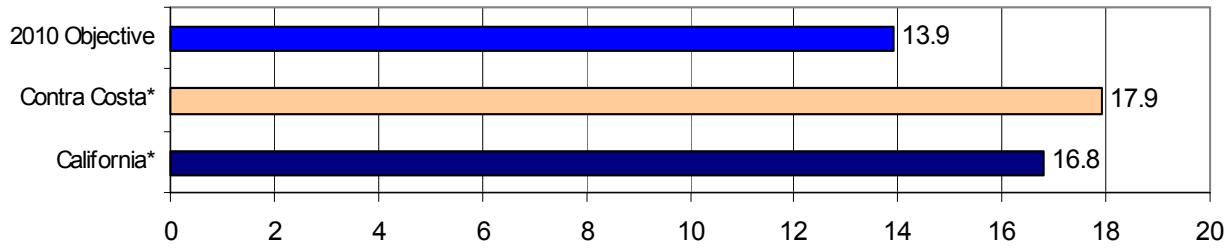
Healthy People 2010 objectives from the US Department of Health and Human Services' Office of Disease Prevention and Health Promotion, available online at http://www.healthypeople.gov/.

Information about differences in breast cancer cases and deaths is available at the National Cancer Institute site at http://www.cancer.gov/.

Cancer – Colorectal

Locally, we have not met the Healthy People 2010 objective of reducing the age-adjusted death rate from colorectal cancer to no more than 13.9 deaths per 100,000 residents.

Figure 7. Age-adjusted death rates from colorectal cancer



[*] Indicates that the age-adjusted death rates per 100,000 for Contra Costa and California are significantly higher than the 2010 Objective. Contra Costa and California statistics were calculated for the three-year period 2000-2002.

Colorectal cancer is the second leading cause of cancer death

In Contra Costa, colorectal cancer accounts for 10% of all cancer deaths. Over a three-year period 2000-2002, there were 507 Contra Costa residents who died of colorectal cancer. This means that **approximately 165 Contra Costa residents die from colorectal cancer each year**.

The age-adjusted death rate from colorectal cancer is similar in Contra Costa (17.9 per 100,000) and California (16.8 per 100,000).

Colorectal cancer deaths are in every community

In this analysis, we found no statistically significant differences in the age-adjusted death rate from colorectal cancer in the following communities compared to Contra Costa as a whole.

Table 35. Colorectal cancer deaths in selected communities. Contra Costa, 2000-2002

	Rate	Percent	(Number)
San Pablo	29.8	4%	(20)
Martinez	29.8	5%	(27)
Richmond	21.0	11%	(53)
Concord	19.7	13%	(65)
Walnut Creek	17.7	16%	(79)
Antioch	14.4	6%	(28)
Contra Costa	**17.9**	**100%**	**(507)**

Due to small numbers (<20 deaths), age-adjusted rates per 100,000 could not be calculated for Bay Point, Brentwood, Oakley, Pinole or Pittsburg.

The greatest number of the deaths from colorectal cancer occur among people living in Walnut Creek (79, 16%), **followed by people living in Concord** (65, 13%), **Richmond** (53, 11%), **Antioch** (28, 6%) and **Martinez** (27, 5%).

All races are affected

Table 36. Colorectal cancer deaths by race/ethnicity. Contra Costa, 2000-2002

	Rate	Percent	(Number)
African American	25.2	10%	(52)
White	17.8	74%	(376)
Latino	17.7	8%	(38)
Asian	12.6	7%	(35)
Contra Costa	**17.9**	**100%**	**[1](507)**

[1]The Contra Costa total also includes the 6 deaths that occurred among people from other race/ethnic groups such as Native American and Alaska Natives, Native Hawaiians and Pacific Islanders and people from two or more race groups. Due to small numbers (<20 deaths), age-adjusted rates per 100,000 could not be calculated for these groups.

In this analysis we found no statistically significant differences in the age-adjusted death rate from colorectal cancer among African Americans, Whites, Latinos and Asians compared to the county overall.

The greatest number of deaths from colorectal cancer occur among Whites (376, 74%), **followed by African Americans** (52, 10%), **Latinos** (38, 8%) and **Asians** (35, 7%).

Colorectal cancer affects both men and women

In this analysis, we found no statistically significant differences in the age-adjusted death rate from colorectal cancer among men, women and the county overall. Slightly over half of the deaths from colorectal cancer occur among women.

Table 37. Colorectal cancer deaths by gender. Contra Costa, 2000-2002

	Rate	Percent	(Number)
Men	20.8	48%	(243)
Women	15.9	52%	(264)
Contra Costa:	**17.9**	**100%**	**(507)**

Nationally, colorectal cancer is the second leading cause of cancer-related death (after lung cancer). African Americans are the race/ethnic group with the highest age adjusted rate of colorectal death. The rate among African American men is higher than that of African American women.

Colorectal cancer is a chronic disease that is heavily influenced by age. This means that **people become much more likely to develop and die from colorectal cancer as they get older**.

Using this data to improve community health

In order to reduce unfair health differences, it is important to target the groups with the highest age-adjusted death rates from a given cause. In this analysis, no community, race/ethnic group or gender had a higher age-adjusted death rate compared to the county as a whole, even though **national statistics tell us that African American men and women are the most likely to die of colorectal cancer**.

In order to reduce the overall number of deaths in the county (without regard to health disparities) it may be better to target interventions to the group that accounts for the highest percent of deaths from a given cause. For colorectal cancer, these are Whites, African Americans, and people living in Walnut Creek, Concord and Richmond.

Access to routine medical screenings and care is important to good health. Many Contra Costa residents diagnosed with chronic diseases, like colorectal cancer, can keep getting sicker when they lack health insurance, transportation or sufficient English skills to navigate health care systems. Providing culturally competent and accessible heath care to all residents will be key to lowering the county's death rates.

Because a person's risk for developing or dying from a chronic disease like colorectal cancer increases as they age, it is important to target ongoing environmental and behavioral interventions to the young and middle-aged, in addition to older populations. Examples could include strategies to increase community access to fruits and vegetables or to teach individuals how to prepare more healthy meals.

Why are age-adjusted rates important?

An age-adjusted rate controls for differences in age and population size. An age-adjusted rate is the best summary statistic for comparing the impact of chronic diseases, such as colorectal cancer, that are heavily influenced by age.

For example, the White population is older and the Latino population is younger than the county as a whole. Without age-adjustment, we would expect to see higher death rates among Whites than among Latinos, and we would expect that these differences would be largely due to age. An age-adjusted rate calculates what the death rates would look like if the White and Latino populations had the same age distribution. The age-adjusted death rate is useful **identifying differences that are due to poor access to health care or environmental and behavioral risk factors** instead of age. (See the Methods section at the back of this report for more information about using rates.)

How to calculate the percentage and number of deaths

Percentages describe the proportion of countywide deaths from colorectal cancer that occur within a particular community, race/ethnic group or gender.

The percentage is calculated by dividing the number of deaths that occur within a specific community, race/ethnic group or gender by the total number of deaths countywide and then multiplying that number by 100. The numbers show the actual number of deaths from each cause over a three-year period. The number of deaths per year can be calculated by dividing the total number of deaths from 2000-2002, as shown in the tables, by three.

Confidence intervals are available
You may download and view all detailed tables with 95% confidence intervals, at http://cchealth.org/health_data/hospital_council/

Data sources

Mortality data from the California Department of Health Services (CDHS), http://www.dhs.ca.gov/, Center for Health Statistics' Death Statistical Master File, 2000-2002. Any analyses, interpretations or conclusions of the data have been reached by CHAPE and are not from the CDHS.

Population data from the California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050, and E-4 Population Estimates for Cities, Counties, and the State, 2001-2004, with DRU Benchmark, available online at: http://www.dof.ca.gov/HTML/DEMOGRAP/Druhpar.htm. Sacramento, California, May 2004.
Note: City-level denominators were extrapolated from the E-4 file to approximate the mid-year city-level population estimates that are needed to calculate city-level rates. For more information, please see our section on statistical methods.

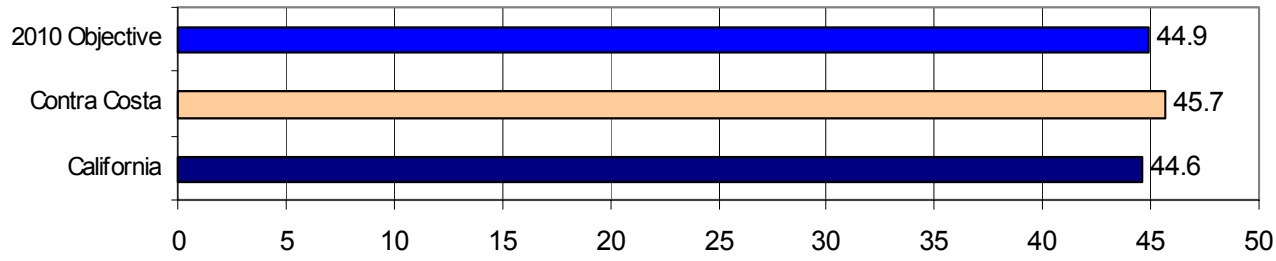
ICD10 coding for malignant neoplasm of colon, rectosigmoid junction, rectum and anus (ICD C18-C21) from the Centers for Disease Control and Prevention National Center for Health Statistics, available online at: http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_16.pdf.

Healthy People 2010 objectives from the US Department of Health and Human Services' Office of Disease Prevention and Health Promotion, available online at http://www.healthypeople.gov/.

Cancer – Lung

Contra Costa has successfully met the Healthy People 2010 objective of reducing the age-adjusted death rate from lung cancer to no more than 44.9 deaths per 100,000 residents.

Figure 8. Age-adjusted death rates from lung cancer



The age-adjusted death rates per 100,000 for Contra Costa and California are virtually the same as the 2010 Objective. Contra Costa and California statistics were calculated for the three-year period 2000-2002.

Lung cancer is the leading cause of cancer death

In Contra Costa, lung cancer accounts for 25% of all cancer deaths. Over a three-year period 2000-2002, there were 1,279 Contra Costa residents who died of lung cancer. This means that approximately **425 Contra Costa residents die from lung cancer each year**.

The age-adjusted death rate from lung cancer is virtually the same in Contra Costa (45.7 per 100,000) and California (44.6 per 100,000).

People living in San Pablo and Bay Point and men are more likely to die from lung cancer compared to the county overall. These differences are not due to the age of the population and are likely due to lack of health care, environmental risks or unhealthy behaviors, especially smoking.

Some communities have lung cancer rates much higher than others

Residents of San Pablo and Bay Point are more likely to die from lung cancer compared to Contra Costa as a whole.

Table 38. Lung cancer deaths in selected communities. Contra Costa, 2000-2002

	Rate	Percent	(Number)
San Pablo	*109.9	6%	(71)
Bay Point	*89.3	3%	(32)
Martinez	62.9	5%	(62)
Oakley	58.1	2%	(24)
Concord	55.8	14%	(185)
Antioch	54.7	8%	(103)
Richmond	53.9	11%	(139)
Brentwood	52.6	3%	(32)
Walnut Creek	48.4	14%	(181)
Pittsburg	47.6	5%	(59)
Pinole	42.8	2%	(27)
Contra Costa	**45.7**	**100%**	**(1,279)**

[*] Indicates that the age-adjusted death rate per 100,000 is significantly higher for people living in these communities compared to Contra Costa as a whole.

A large number of the deaths from lung cancer occur among people living in Concord (185, 14%), **followed by people living in Walnut Creek** (181, 14%), Richmond (139, 11%), Antioch (103, 8%), San Pablo (71, 6%), Martinez (62, 5%) and Pittsburg (59, 5%).

No single racial group is at higher risk for lung cancer death

No racial/ethnic group was found to be at significantly higher risk than the county as a whole. This analysis shows Asians and Latinos are less likely to die from lung cancer compared to the county as a whole.

Table 39. Lung cancer deaths by race/ethnicity. Contra Costa, 2000-2002

	Rate	Percent	(Number)
African American	56.1	9%	(115)
White	50.6	81%	(1,041)
Asian	30.0	6%	(80)
Latino	17.7	3%	(36)
Contra Costa	**45.7**	**100%**	**[1](1,279)**

[1] The Contra Costa total also includes the 7 deaths that occurred among people from other race/ethnic groups such as Native American and Alaska Natives, Native Hawaiians and Pacific Islanders and people from two or more race groups. Due to small numbers (<20 deaths), age-adjusted rates per 100,000 could not be calculated for these groups.

The majority of deaths from lung cancer occur among Whites (1,041, 81%), followed by African Americans (115, 9%), Asians (80, 6%) and Latinos (36, 3%).

Both men and women die from lung cancer

Men are more likely to die from lung cancer and women are less likely to die from lung cancer compared to the county as a whole. Just over half of the deaths from lung cancer occur among men.

Table 40. Lung cancer deaths by gender. Contra Costa, 2000-2002

	Rate	Percent	(Number)
Men	*55.5	51%	(658)
Women	38.9	49%	(621)
Contra Costa:	**45.7**	**100%**	**(1,279)**

[*] Indicates that the age-adjusted death rate is significantly higher among men compared to Contra Costa as a whole.

Exposure to tobacco is responsible for most lung cancer

Lung cancer incidence and **mortality rates increased dramatically through much of the last century**, first in men and then in women.

Lung cancer is a chronic disease that is heavily influenced by age. This means that people become much more likely to develop and die from lung cancer as they get older.

Cigarette smoking is the primary risk factor for getting lung cancer. **Men who smoke increase their risk of dying from lung cancer by more than 22 times**, and women who smoke increase their risk of dying from lung cancer by nearly 12 times. Cigars, pipes, secondhand smoke, radon, asbestos, pollution and lung diseases can also increase a person's risk for lung cancer.

Using this data to improve community health

In order to reduce unfair health differences, it is important to target the groups with the highest age-adjusted death rates from a given cause. For lung cancer, these are people living in San Pablo and Bay Point and men.

In order to reduce the overall number of deaths in the county (without regard to health disparities) it may be better to target interventions to the group that accounts for the highest percentage of deaths from a given cause. For lung cancer, these are Whites, and people living in Concord, Walnut Creek and Richmond.

Access to routine medical screenings and care is important to good health. Many Contra Costa residents diagnosed with chronic diseases, like lung cancer, can keep getting sicker when they lack health insurance, transportation, or sufficient English skills to navigate health care systems. Providing culturally competent and accessible heath care to all residents will be key to lowering the county's death rates.

Because a person's risk for developing or dying from a chronic disease like lung cancer increases as they age, it is important to target ongoing environmental and behavioral interventions to the young and middle-aged, in addition to older populations. Examples could include strategies to **limit youth access to cigarettes or secondhand smoke**.

Why are age-adjusted rates important?

An age-adjusted rate controls for differences in age and population size. An age-adjusted rate is the best summary statistic for comparing the impact of chronic diseases, such as lung cancer, that are heavily influenced by age.

For example, the White population is older and the Latino population is younger than the county as a whole. Without age-adjustment, we would expect to see higher death rates among Whites than among Latinos, and we would expect that these differences would be largely due to age. An age-adjusted rate calculates what the death rates would look like if the White and Latino populations had the same age distribution. The age-adjusted death rate is

useful **identifying differences that are due to poor access to health care or environmental and behavioral risk factors** instead of age. (See the Methods section at the back of this report for more information about using rates.)

The differences highlighted above are statistically significant. This means that we are 95% certain that these differences are not due to chance.

How to calculate the percentage and number of deaths

Percentages describe the proportion of countywide deaths from lung cancer that occur within a particular community, race/ethnic group or gender. The percentage is calculated by dividing the number of deaths that occur within a specific community, race/ethnic group, or gender by the total number of deaths countywide and then multiplying that number by 100.

Numbers show the actual number of deaths from each cause over a three-year period. The number of deaths per year can be calculated by dividing the total number of deaths from 2000-2002, as shown in the tables, by three.

Confidence intervals are available
You may download and view all detailed tables with 95% confidence intervals, at http://cchealth.org/health_data/hospital_council/

Data sources

Mortality data from the California Department of Health Services (CDHS), http://www.dhs.ca.gov/, Center for Health Statistics' Death Statistical Master File, 2000-2002. Any analyses, interpretations or conclusions of the data have been reached by CHAPE and are not from the CDHS.

Population data from the California Department of Finance, Race/ Ethnic Population with Age and Sex Detail, 2000- 2050, and E-4 Population Estimates for Cities, Counties, and the State, 2001-2004, with DRU Benchmark, available online at: http://www.dof.ca.gov/HTML/DEMOGRAP/Druhpar.htm. Sacramento, California, May 2004.
Note: City-level denominators were extrapolated from the E-4 file to approximate the mid-year city-level population estimates that are needed to calculate city-level rates. For more information, please see our section on statistical methods.

ICD10 coding for malignant neoplasm of trachea, bronchus, and lung (ICD C33-C34) from the Centers for Disease Control and Prevention National Center for Health Statistics, available online at: http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_16.pdf.

Healthy People 2010 objectives from the US Department of Health and Human Services' Office of Disease Prevention and Health Promotion, available online at http://www.healthypeople.gov/.

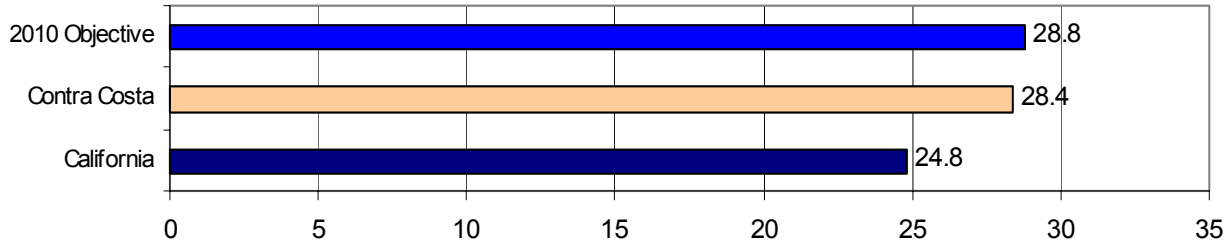
Information on the national increase in lung cancer during the last century from Wingo PA, Ries LA, Giovino GA, et al.: Annual report to the nation on the status of cancer, 1973-1996, with a special section on lung cancer and tobacco smoking. J Natl Cancer Inst 91 (8): 675-90, 1999.

Information about risk for lung cancer from the United States National Institute for Health's National Cancer Institute's lung cancer homepage, available online at: http://www.nci.nih.gov/cancertopics/types/lung, and the Centers for Disease Control and Prevention's National Center for Chronic Disease Prevention and Health Promotion's Tobacco Information and Prevention Source (TIPS) website on cigarette smoking-related mortality, available online at: http://www.cdc.gov/tobacco/research_data/health_consequences/mortali.htm.

Cancer – Prostate

Contra Costa has successfully met the Healthy People 2010 objective of reducing the age-adjusted death rate from prostate cancer to no more than 28.8 deaths per 100,000 men.

Figure 9. Age-adjusted death rates from prostate cancer



The age-adjusted death rates per 100,000 men for Contra Costa and California are nearly the same as the 2010 Objective. Contra Costa and California statistics were calculated for the three-year period 2000-2002.

Prostate cancer is the second leading cause of cancer death among men

In Contra Costa, prostate cancer accounts for 6% of all cancer deaths, and 12% of the cancer deaths among men. Over a three-year period 2000-2002, there were 299 Contra Costa men who died of prostate cancer. This means that **approximately 100 Contra Costa men die of prostate cancer each year**.

The age-adjusted death rate from prostate cancer is similar among men living in Contra Costa (28.4 per 100,000) and California (24.8 per 100,000).

In Contra Costa, African American men are more likely to die from prostate cancer compared to the county overall. This difference is not due to the age of the population and is likely due to lack of health care or late detection of the cancer.

There are unfair racial differences in prostate cancer deaths

African American men are more likely to die from prostate cancer compared to men living in Contra Costa as a whole.

Table 41. Prostate cancer deaths by race/ethnicity. Contra Costa, 2000-2002

	Rate	Percent	(Number)
African American	*80.4	17%	(51)
White	27.5	76%	(226)
Latino	--	5%	(16)
Asian	--	2%	(6)
Contra Costa	28.4	100%	(299)

[*] Indicates that the age-adjusted death rate per 100,000 is significantly higher among African Americans compared to Contra Costa as a whole.
-- Due to small numbers (<20 deaths), rates could not be calculated for Latinos or Asians.

The majority of deaths from prostate cancer occur among Whites (226, 76%), **followed by African Americans** (51, 17%), Latinos (16, 5%) and Asians (6, 2%).

Prostate cancer deaths occur in all Contra Costa communities

In this analysis, we found no statistically significant differences in the age-adjusted death rate from prostate cancer in the following communities compared to Contra Costa as a whole. It is likely that the local numbers are too small to detect such differences by community.

Table 42. Prostate cancer deaths in selected communities. Contra Costa, 2000-2002

	Rate	Percent	(Number)
Richmond	40.5	12%	(37)
Walnut Creek	31.9	19%	(56)
Concord	25.4	10%	(30)
Contra Costa	**28.4**	**100%**	**(299)**

Due to small numbers (<20 deaths), rates could not be calculated for men living in Antioch, Bay Point, Brentwood, Martinez, Oakley, Pinole, Pittsburg or San Pablo.

The greatest number of the deaths from prostate cancer occur among men living in Walnut Creek (56, 19%), **Concord** (37, 12%) **and Richmond** (30, 10%).

Nationally the distribution of prostate cancer death is similar to the local distribution. In 2001, African Americans had an age-adjusted death rate of 66.1 per 100,000 compared to 26.6 for Whites.

Prostate cancer is a chronic disease that is heavily influenced by age. This means that men become much more likely to develop and die from prostate cancer as they get older.

Using this data to improve community health

In order to reduce health disparities, it is important to target the groups with the highest age-adjusted death rates from a given cause. For prostate cancer, these are African American men.

In order to reduce the overall number of deaths in the county (without regard to health disparities) it may be better to target interventions to the group that accounts

for the highest percentage of deaths from a given cause. For prostate cancer, these are White and African American men, as well as men living in Walnut Creek, Concord and Richmond.

Because a person's risk for developing or dying from a chronic disease like prostate cancer increases as they age, it is important to target ongoing environmental and behavioral interventions to the young and middle-aged, in addition to older populations. Examples include educating middle-aged and older men about the importance of screening.

Why are age-adjusted rates important?

An age-adjusted rate controls for differences in age and population size. An age-adjusted rate is the best summary statistic for comparing the impact of chronic diseases, like prostate cancer, that are heavily influenced by age.

For example, the White population is older and the Latino population is younger than the county as a whole. Without age-adjustment, we would expect to see higher death rates among Whites than among Latinos, and we would expect that these differences would be largely due to age. An age-adjusted rate calculates what the death rates would look like if the White and Latino populations had the same age distribution. The age-adjusted death rate is useful in **identifying differences that are due to poor access to health care or environmental and behavioral risk factors** instead of age. (See the Methods section at the back of this report for more information about using rates.)

The differences highlighted above are statistically significant. This means that we are 95% certain that these differences are not due to chance.

How to calculate the percentage and number of deaths

Percentages describe the proportion of countywide deaths from prostate cancer that occur within a particular race/ethnic group or community. The percentage is calculated by dividing the number of deaths that occur within a specific race/ethnic group or community by the total number of deaths countywide and multiplying that number by 100.

Numbers show the actual number of deaths from each cause over a three-year period. The number of deaths per year can be calculated by dividing the total number of deaths from 2000-2002, as shown in the tables, by three.

Confidence intervals are available
You may download and view all detailed tables with 95% confidence intervals, at http://cchealth.org/health_data/hospital_council/

Data sources

Mortality data from the California Department of Health Services (CDHS), http://www.dhs.ca.gov/, Center for Health Statistics' Death Statistical Master File, 2000-2002. Any analyses, interpretations or conclusions of the data have been reached by CHAPE and are not from the CDHS.

Population data from the California Department of Finance, Race/ Ethnic Population with Age and Sex Detail, 2000-2050, and E-4 Population Estimates for Cities, Counties, and the State, 2001-2004, with DRU Benchmark, available online at: http://www.dof.ca.gov/HTML/DEMOGRAP/Druhpar.htm. Sacramento, California, May 2004.

Note: City-level denominators were extrapolated from the E-4 file to approximate the mid-year city-level population estimates that are needed to calculate city-level rates. For more information, please see our section on statistical methods.

ICD10 coding for malignant neoplasm of prostate (ICD C61) from the Centers for Disease Control and Prevention National Center for Health Statistics, available online at: http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_16.pdf.

Healthy People 2010 objectives from the US Department of Health and Human Services' Office of Disease Prevention and Health Promotion, available online at http://www.healthypeople.gov/.

Health, United States, 2003 Age-adjusted death rates for selected causes of death, according to sex, race, and Hispanic origin: United States, selected years 1950-2001, Table 29. Available online at http://www.cdc.gov/nchs/fastats/prostate.htm

Diabetes - Deaths

African Americans and Latinos are more likely to die from diabetes than other Contra Costa residents.

Diabetes is the seventh leading cause of death

In Contra Costa, diabetes accounts for 2% of all deaths. Over a three-year period, 2000 to 2002, there were 490 Contra Costa residents who died of diabetes. This means that **approximately 160 Contra Costa residents die of diabetes each year**.

African Americans and Latinos, as well as people living in San Pablo, Richmond, and Pittsburg, are more likely to die from diabetes compared to the county overall. These differences are likely due to limited health care access, environmental risks or unhealthy behaviors.

The age-adjusted **death rate from diabetes is lower in Contra Costa** (17.4 per 100,000) **than California** (20.8 per 100,000).

Contra Costa and California statistics were calculated for the three-year period 2000-2002.

There are unfair racial differences in diabetes deaths

African Americans and Latinos are more likely to die from diabetes compared to Contra Costa as a whole. Asians are equally likely to die from diabetes, and Whites are less likely to die from diabetes, compared to the county as a whole.

The largest number of deaths from diabetes occur among Whites (285, 58%), followed by African Americans (103, 21%), Latinos (57, 12%), and Asians (39, 8%).

Table 43. Diabetes deaths by race/ethnicity. Contra Costa, 2000-2002

	Rate	Percent	Number
African American	*54.8	21%	(103)
Latino	*27.2	12%	(57)
Asian	17.3	8%	(39)
White	13.7	58%	(285)
Contra Costa	**17.4**	**100%**	**[1](490)**

[*] Indicates that the age-adjusted death rate (per 100,000) is significantly higher among African Americans and Latinos compared to Contra Costa as a whole.

[1] The Contra Costa total also includes the 6 deaths that occurred among people from other race/ ethnic groups such as Native American and Alaska Natives, Native Hawaiians and Pacific Islanders, and people from two or more race groups. Due to small numbers (<20 deaths), rates could not be calculated for these groups.

Some cities have diabetes rates much higher than others

Residents of San Pablo, Richmond, and Pittsburg are more likely to die from diabetes, and people living in Walnut Creek are less likely to die from diabetes, compared to Contra Costa as a whole.

Table 44. Diabetes deaths in selected cities. Contra Costa, 2000 - 2002

	Rate	Percent	Number
San Pablo	*38.9	5%	(26)
Richmond	*35.8	18%	(90)
Pittsburg	*29.7	8%	(37)
Martinez	29.5	5%	(26)
Concord	20.3	14%	(67)
Antioch	19.0	7%	(35)
Walnut Creek	11.3	10%	(49)
Contra Costa	**17.4**	**100%**	**(490)**

[*] Indicates that the age-adjusted death rate (per 100,000) is significantly higher for people living in these communities compared to Contra Costa as a whole.

A large proportion of the deaths from diabetes occur among people living in Richmond (90, 18%), followed by people living in Concord (67, 14%), Walnut Creek (49, 10%), Pittsburg (37, 8%), Antioch (35, 7%), San Pablo (26, 5%), and Martinez (26, 5%).

Men and women die from diabetes in almost equal numbers

The age-adjusted death rate from diabetes is similar among men, women, and Contra Costa overall. Slightly over half of the deaths from diabetes occur among women.

Table 45. Diabetes deaths by gender. Contra Costa, 2000 - 2002

	Rate	Percent	Number
Men	20.2	48%	(234)
Women	15.5	52%	(256)
Contra Costa	**17.4**	**100%**	**(490)**

Currently, it is unclear if Contra Costa has met the Healthy People 2010 National Objective of reducing the age-adjusted death rate from diabetes to no more than 45.0 deaths per 100,000 residents. The Healthy People 2010 Objective for diabetes deaths is based on both underlying and contributing causes of death. Multiple causes of death data for 2002 for California and Contra Costa were not available for use in this report.

The statistics in this report include only those cases in which the primary cause of death was coded as diabetes. These statistics do not include people with diabetes that died of other causes such as heart disease or stroke. The CDC's National Center for Chronic Disease Prevention and Health Promotion estimates that **roughly 75% of people with diabetes die of heart disease or stroke**.

Diabetes death rates in Contra Costa will probably get worse

With the aging of the baby boomers and the growing number of overweight/obese Americans, the death rate from diabetes will probably continue to increase.

Diabetes is a chronic disease that is heavily influenced by age. This means that people become much more likely to develop - and die from - diabetes as they get older. The national data show that African Americans, American Indian and Alaska Natives, and Latinos are more likely to die from diabetes compared to the population as a whole.

Obesity is a major risk factor for developing diabetes. This risk can be significantly reduced by adopting a healthy diet and becoming physically active.

Diabetes is a major cause of disability. People with diabetes are more likely to have blindness, kidney failure, leg and foot amputations, heart disease and stroke. Many of these outcomes can be managed and even prevented through proper care.

Using this data to improve community health

In order to reduce unfair health differences, it is important to focus on the population groups with the highest age-adjusted death rates. For diabetes, this is African Americans, Latinos, and people living in San Pablo, Richmond and Pittsburg.

In order to lower Contra Costa's overall diabetes death rate and reduce the total number of diabetes deaths (without regard to health disparities), efforts must include those residents who account for the highest percent of deaths. For diabetes, these are Whites, African Americans and Latinos, as well as people living in Richmond, Concord and Walnut Creek.
Because a person's risk for developing or dying from a chronic disease like diabetes often begins early in life and builds over time, it is important to target ongoing environmental and behavioral interventions to the young and middle-aged, in addition to older populations. Examples could include strategies to limit youth access to junk food while at school, increase community access to safe and fun places to exercise, or educate people about the importance of regular health screenings.

Access to routine medical screenings and care is important to good health. Many Contra Costa residents diagnosed with chronic diseases like diabetes can keep getting sicker when they lack health insurance, transportation or sufficient English skills to navigate our health care systems. Providing culturally competent and accessible heath care to all residents will be key.

Why are age-adjusted rates important?

An age-adjusted rate controls for differences in age distribution, as well as population size. An age-adjusted rate is the best summary measure for comparing the impact of chronic diseases that are heavily influenced by age.

For example, the White population is older and the Latino population is younger than the county as a whole. Without age-adjustment, we would expect to see higher death rates among Whites than among Latinos, and we would expect that these differences would be largely due to age. An age-adjusted rate calculates what the death rates would look like if the White and Latino populations had the same age distribution. The **age-adjusted death rate is useful in identifying differences that are due to environmental or behavioral risk factors instead of age.** (Please see the Methods section at the back of this report for more information about using rates.)

The differences highlighted above are statistically significant. This means that we are 95% certain that these differences are not due to chance.

How to calculate the percentage and number of deaths

The percentages describe the proportion of countywide deaths from diabetes that occur within a particular race/ethnic group, community or gender. The percent is calculated by dividing the number of deaths that occur within a specific race/ ethnic group, community, or gender by the total number of deaths countywide and multiplying by 100.

The numbers show the actual number of deaths from each cause over a three-year period. The number of deaths per year can be calculated by dividing the total number of deaths from 2000-2002, as shown in the tables, by three.

Confidence intervals are available
You may download and view all detailed tables with 95% confidence intervals, at *http://www.cchealth.org/health_data/hospital_council/*

Data Sources

Mortality data from the California Department of Health Services (CDHS), *http://www.dhs.ca.gov/*, Center for Health Statistics' Death Statistical Master File, 2000-2002. Any analyses, interpretations or conclusions of the data have been reached by CHAPE and are not from the CDHS.

Population data from the California Department of Finance, Race/ Ethnic Population with Age and Sex Detail, 2000-2050, and E-4 Population Estimates for Cities, Counties, and the State, 2001-2004, with DRU Benchmark, available online at: *http://www.dof.ca.gov/HTML/DEMOGRAP/Druhpar.htm*. Sacramento, California, May 2004.

Note: City-level denominators were extrapolated from the E-4 file to approximate the mid-year city-level population estimates that are needed to calculate city-level rates. For more information, please see our section on statistical methods.

ICD10 coding for diabetes mellitus (ICD E10-E14) from the Centers for Disease Control and Prevention National Center for Health Statistics, available online at: *http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_16.pdf*.

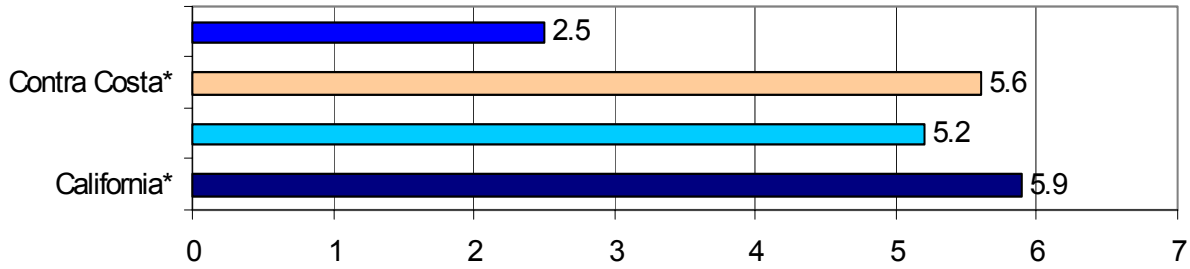
Healthy People 2010 objectives from the US Department of Health and Human Services' Office of Disease Prevention and Health Promotion, available online at *http://www.healthypeople.gov/*.

Information about national trends and diabetes-related complications from the CDC's National Center for Chronic Disease Prevention and Health Promotion, available online at http://www.cdc.gov/diabetes/ and at *http://www.healthypeople.gov/*.

Diabetes – Diagnosed Cases

Contra Costa has not met the Healthy People 2010 objective of reducing the proportion of adults that have been diagnosed with diabetes to 2.5%.

Figure 10. Percent of adults diagnosed with diabetes, 2001



[*] Indicates that the percent of adults that have been diagnosed with diabetes is higher in Contra Costa, the Bay Area and California than the 2010 objective.

Approximately 39,000 Contra Costa adults **have been diagnosed with diabetes**. The proportion of adults that have been diagnosed with diabetes (5-6%) is **virtually the same in Contra Costa, the Bay Area and California**.

The burden of diabetes differs by racial group.

African Americans (11.8%) **are more likely to be diagnosed with diabetes** compared to the Bay Area (5.2%) as a whole.

Table 45. Adults diagnosed with diabetes by race/ethnicity, San Francisco Bay Area, 2001 [1]

	Percent Diagnosed	Number
African American	*11.8%	39,000
Latino	5.0%	35,000
White	4.9%	139,000
Asian	3.9%	39,000
Bay Area	5.2%	262,000[2]

[*] Indicates that African Americans are significantly more likely to be diagnosed with diabetes compared to the Bay Area overall.

[1] Due to small numbers, the race/ethnic estimates combine data from the nine Bay Area Counties: Alameda, Contra Costa, Marin, Napa, Santa Clara, San Francisco, San Mateo, Solano and Sonoma.

[2] The Bay Area total also includes the 10,000 Native American/Alaska Native adults and adults from other single/two or more race groups that have been diagnosed with diabetes. Reliable Bay Area estimates were not available for these groups.

More than half of the adults that have been diagnosed with diabetes are White (139,000). Smaller numbers of African Americans (39,000), Asians (39,000) and Latinos (35,000) were diagnosed with diabetes.

The number of diabetes cases will grow

With the aging of the baby boomers and the rise in overweight and obesity, the percentage of people with diabetes will probably continue to increase.

Diabetes is a chronic disease that is heavily influenced by age. This means that people become much more likely to develop and die from diabetes as they get older.

Obesity is also an important contributor to diabetes. A person can reduce their risk for diabetes by adopting a healthy diet and becoming physically active.

Diabetes is a major cause of disability and death. People with diabetes are more likely to have heart disease, stroke and other diabetes-related complications such as blindness, kidney failure and leg and foot amputations. Many of these complications can be managed and even prevented through proper care.

There are three kinds of diabetes

The diabetes statistics include information about adults that have been diagnosed with type I or type II diabetes. They do not include information about pregnancy-related diabetes.

Type II diabetes accounts for 90-95% of people with diabetes and most often occurs after the age of 40. Though historically viewed as an adult-only disease, type II diabetes is now being found at younger ages and is even being diagnosed among children and teens. **Type II diabetes is linked to obesity and physical inactivity** - both of which can be modified to improve health.

Type I diabetes, also known as insulin dependent diabetes, is an autoimmune disease and most typically occurs in children and young adults.

Pregnancy-related diabetes develops only during pregnancy and usually disappears after delivery. However, a woman who has had pregnancy-related diabetes is at increased risk for developing type II diabetes later in life.

Using this data to improve community health

In order to reduce unfair health disparities, it is important to target interventions to the groups that are most at risk for developing diabetes. In the Bay Area, African Americans, and possibly Latinos and American Indians/Alaska Natives are at greatest risk.

The local data shows that African Americans are more likely to be diagnosed with diabetes. It is also thought that other groups, such as **American Indian/Alaska Natives and Latinos, may also have a higher risk** for developing diabetes. State estimates indicate that 9.3% of Native American/Alaska Native adults have been diagnosed with diabetes and suggest that this group also has a higher risk. For Latinos, the local and state estimates are not adjusted for age and do not account for the fact that the Latino population is so young. The age-adjusted mortality statistics indicate that Latinos, as well as African

Americans, are more likely to die from diabetes compared to the county as a whole. Due to small numbers (<20 deaths), there are no local mortality statistics for American Indian/Alaska Natives.

In order to reduce the Bay Area's overall diabetes rate and meet the Healthy 2010 objective, local efforts must target White residents, which account for the highest number of adults diagnosed with diabetes.

Because a person's risk for developing or dying from a chronic disease like diabetes is cumulative, it is important to target ongoing environmental and behavioral interventions to the young and middle-aged, in addition to older populations. Examples could include strategies to limit youth access to junk food while at school, increase community access to safe and fun places to exercise or educate people about the importance of regular health screenings.

Access to routine medical screenings and care is important to good health. Many Contra Costa residents diagnosed with chronic diseases like diabetes can keep getting sicker when they lack health insurance, transportation, or sufficient English skills to navigate health care systems. Providing culturally competent and accessible heath care is key to improving the health of all Contra Costa residents.

Notes on using this data

The race/ethnic differences that have been highlighted above are statistically significant. This means that we are 95% certain that these differences are not due to chance.

It is important to note that these statistics estimate

the proportion of adults that have been diagnosed with diabetes - it is unknown how many adults may have diabetes but remain undiagnosed. Undiagnosed cases of diabetes are not included in these estimates.

In addition, **these statistics are not adjusted for age**. An age-adjusted proportion or rate is the best measure for comparing the impact of chronic diseases that are heavily influenced by age. Because these statistics are estimated from a weighted sample, we were not able to adjust for age. If we had been able to adjust for age, the proportion of adults that have been diagnosed with diabetes would increase slightly for Contra Costa, decrease among Whites, and increase among African Americans, Latinos and Asians.

The **diabetes statistics are generated from a telephone survey** that asks questions to a randomly selected group of adults in Contra Costa and other counties in California.

These statistics are estimates and we expect that these estimates will be slightly different each time the survey is conducted. Currently, **we do not recommend using these estimates for evaluating community health projects**.

Confidence intervals are available
You may download and view all detailed tables with 95% confidence intervals, at http://cchealth.org/health_data/hospital_council/

Data sources

Local data about diabetes from the California Health Interview Survey's AskCHIS data query system, copyright (c) 2003 the Regents of the University of California, all rights reserved, available online at http://www.chis.ucla.edu/.

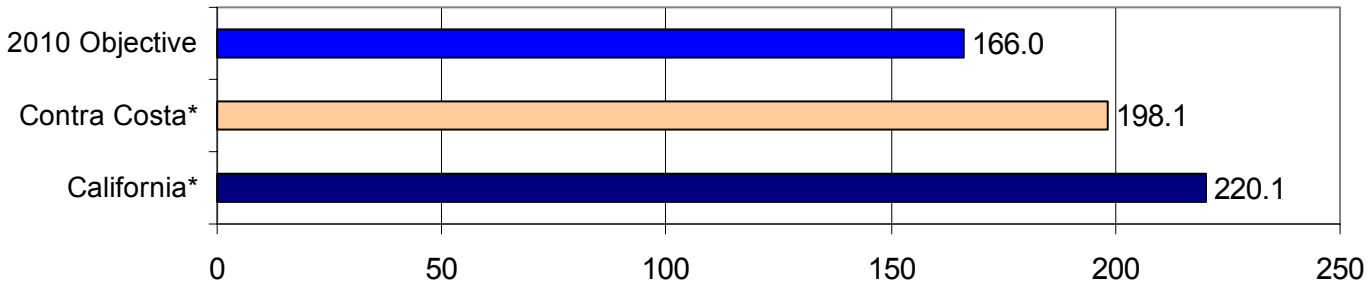
Healthy People 2010 objectives from the US Department of Health and Human Services' Office of Disease Prevention and Health Promotion, available online at http://www.healthypeople.gov/.

Information about national trends and diabetes-related complications from the CDC's National Center for Chronic Disease Prevention and Health Promotion, available online at http://www.cdc.gov/diabetes/

Heart Disease

Contra Costa has not met the Healthy People 2010 objective of reducing the age-adjusted death rate from heart disease to no more than 166.0 deaths per 100,000 residents.

Figure 11. Age-adjusted death rates from heart disease



[*] Indicates that the age-adjusted death rates per (100,000) for Contra Costa and California are significantly higher than the 2010 Objective. Contra Costa and California statistics were calculated for the three-year period 2000-2002.

Heart disease is the leading cause of death

In Contra Costa, **heart disease accounts for 27% of all deaths**. Over a three-year period, 2000 to 2002,there were 5,623 Contra Costa residents who died of heart disease. This means that **approximately 1,875 Contra Costa residents die from heart disease each year**.

The age-adjusted death rate from heart disease is significantly lower in Contra Costa (198.1 per 100,000) than California (220.1 per 100,000).

People living in **San Pablo, Oakley, Richmond, Antioch, Brentwood and Pittsburg, as well as African Americans and men, are more likely to die** from heart disease compared to the county overall. These differences are not due to the age of the population and are likely due to environmental risk, unhealthy behaviors or inadequate access to health services.

Some communities have rates much higher than others

Residents of **San Pablo, Oakley, Richmond, Antioch, Brentwood and Pittsburg are more likely to die** from heart disease, and people living in Walnut Creek are less likely to die from heart disease, compared to Contra Costa as a whole.

Table 47. Heart disease deaths in selected communities. Contra Costa, 2000-2002

	Rate	Percent	(Number)
San Pablo	*389.2	5%	(273)
Oakley	*289.0	2%	(100)
Richmond	*281.5	12%	(689)
Antioch	*257.6	8%	(447)
Brentwood	*249.4	2%	(134)
Pittsburg	*246.6	5%	(300)
Martinez	231.0	4%	(212)
Pinole	230.7	3%	(141)
Bay Point	217.8	1%	(76)
Concord	215.6	12%	(686)
Walnut Creek	171.5	15%	(836)
Contra Costa:	**198.1**	**100%**	**(5,623)**

[*] Indicates that the age-adjusted death rate (per 100,000) is significantly higher for people living in these communities compared to Contra Costa as a whole.

A large number of the deaths from heart disease occur among people living in Walnut Creek (836, 15%), **followed by people living in Richmond** (689, 12%), **Concord** (686, 12%), Antioch (447, 8%), Pittsburg (300, 5%) and San Pablo (273, 5%).

Too many African American residents die of heart disease

There are unfair differences in heart disease deaths by race/ethnicity. **African Americans are more likely to die** from heart disease compared to Contra Costa as a whole. Whites are equally likely to die from heart disease, and Latinos and Asians are less likely to die from heart disease, compared to the county as a whole.

Table 48. Heart disease deaths by race/ethnicity. Contra Costa, 2000-2002

	Rate	Percent	(Number)
African American	*319.8	11%	(591)
White	201.9	79%	(4,434)
Latino	152.4	5%	(284)
Asian	122.8	5%	(278)
Contra Costa:	**198.1**	**100%**	**[1](5,623)**

[*] Indicates that the age-adjusted death rate (per 100,000) is significantly higher among African Americans compared to Contra Costa as a whole.
[1]The Contra Costa total also includes the 36 deaths that occurred among people from other race/ethnic groups such as Native American and Alaska Natives, Native Hawaiians and Pacific Islanders, and people from two or more race groups. Due to small numbers (<20 deaths), rates could not be calculated for these groups.

The majority of deaths from heart disease occur among Whites (4,434, 79%), followed by African Americans (591, 11%), Latinos (284, 5%), and Asians (278, 5%).

Men are more likely to die from heart disease

There are differences in heart disease death by gender. Men (239.8 per 100,000) are more likely to die from heart disease, and women (165.0 per 100,000) are less likely to die from heart disease, compared to Contra Costa as a whole.

Table 49. Heart disease deaths by gender. Contra Costa, 2000-2002

	Rate	Percent	(Number)
Men	*239.8	48%	(2,693)
Women	165.0	52%	(2,930)
Contra Costa:	**198.1**	**100%**	**(5,623)**

[*] Indicates that the age-adjusted death rate (per 100,000) is significantly higher among men compared to Contra Costa as a whole.

Though men are more likely to die from heart disease, **over half of the deaths from heart disease occur among women** (2,930, 52%).

Heart disease death rates are improving

Deaths from heart disease have declined steadily over the past 50 years, in large part because of advances in prevention, early detection and treatment.

Heart disease is a chronic disease that is heavily influenced by age. This means that people become much more likely to develop and die from heart disease as they get older.

A person can reduce their risk for heart disease by not smoking, adopting a healthy diet, becoming physically active, and reducing or controlling high blood pressure, high blood cholesterol and diabetes.

Using this data to improve community health

In order to reduce health disparities, it is important to target the groups with the highest age-adjusted death rates from a given cause. For heart disease, these are people living in San Pablo, Oakley, Richmond, Antioch, Brentwood and Pittsburg, as well as African Americans and men.

In order to reduce the overall number of deaths in the county, without regard to health disparities, it may be better to target interventions to the group that accounts for the highest percentage of deaths from a given cause. For heart disease, these are Whites, African Americans, and people living in Walnut Creek, Richmond and Concord.

Because a person's risk for developing or dying from a chronic disease like heart disease is cumulative, it is important to target ongoing environmental and behavioral interventions to the young and middle-aged, in addition to older populations. Examples could include strategies to limit youth access to cigarettes, increase community access to fruits and vegetables, teach people how to better manage stress in their lives, or how to recognize the signs and symptoms of a heart attack or stroke.

Access to routine medical screenings and care is important to good health. Many Contra Costa residents diagnosed with chronic diseases like heart disease can keep getting sicker when they lack health insurance, transportation or sufficient English skills to navigate health care systems. Providing culturally competent and accessible heath care to all residents will be key to lowering the county's death rates.

Why are age-adjusted rates important?

An age-adjusted rate controls for differences in age distribution, as well as population size. An age-adjusted rate is the best summary measure for comparing the impact of chronic diseases like heart disease that are heavily influenced by age.

For example, the White population is older and the Latino population is younger than the county as a whole. Without age-adjustment, we would expect to see higher death rates among Whites than among Latinos, and we would expect that these differences would be largely due to age. An age-adjusted rate calculates what the death rates would look like if the White and Latino populations had the same age distribution. The age-adjusted death rate is useful in **identifying differences that are**

due to poor access to health care or environmental and behavioral risk factors instead of age. (Please see the Methods section at the back of this report for more information about using rates.)

The differences highlighted above are statistically significant. This means that we are 95% certain that these differences are not due to chance.

How to calculate the percentage and number of deaths

Percentages describe the proportion of countywide deaths from heart disease that occur within a particular community, race/ethnic group or gender. The percentage is calculated by dividing the number of deaths that occur within a specific community, race/ethnic group or gender by the total number of deaths countywide, and then multiplying that number by 100.

Numbers show the actual number of deaths from heart disease over a three-year period. The number of deaths per year can be calculated by dividing the total number of deaths from 2000-2002, as shown in the tables, by three.

Confidence intervals are available
You may download and view all detailed tables with 95% confidence intervals, at *http://www.cchealth.org/health_data/hospital_council/*

Data sources

Mortality data from the California Department of Health Services (CDHS), http://www.dhs.ca.gov/, Center for Health Statistics' Death Statistical Master File, 2000-2002. Any analyses, interpretations, or conclusions of the data have been reached by CHAPE and are not from the CDHS.

Population data from the California Department of Finance, Race/ Ethnic Population with Age and Sex Detail, 2000- 2050, and E-4 Population Estimates for Cities, Counties, and the State, 2001-2004, with DRU Benchmark, available online at: http://www.dof.ca.gov/HTML/DEMOGRAP/Druhpar.htm. Sacramento, California, May 2004.

Note: City-level denominators were extrapolated from the E-4 file to approximate the mid-year city-level population estimates that are needed to calculate city-level rates. For more information, please see our section on statistical methods.

ICD10 coding for diseases of the heart (ICD I00-I09, I11, I13, I20-I51) from the Centers for Disease Control and Prevention National Center for Health Statistics, available online at: http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_16.pdf.

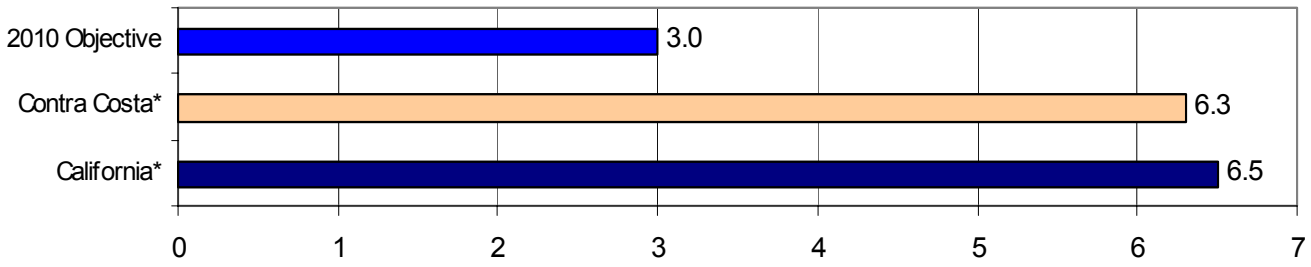
Healthy People 2010 objectives from the US Department of Health and Human Services' Office of Disease Prevention and Health Promotion, available online at http://www.healthypeople.gov/.

Information on national trends from the Centers for Disease Control and Prevention, available online at http://www.cdc.gov/. Decline in deaths from heart disease and stroke-United States, 1900-1999. MMWR 1999; Vol. 48 No. 30: 649-656. Mortality from coronary heart disease and acute myocardial infarction-United States, 1998. MMWR 2001; Vol. 50 No. 6: 90-93.

Homicide

Contra Costa has not met the Healthy People 2010 objective to lower the homicide rate. This is due to the large number of African American men killed each year.

Figure 12. Crude homicide rates per 100,000 residents



[*] Indicates that the crude death rates for Contra Costa and California are significantly higher than the 2010 Objective. Contra Costa and California statistics were calculated for the three-year period 2000-2002.

Since 1990, there has been a decrease in the national homicide rate but the rate remains unacceptably high.

Contra Costa has not met the Healthy People 2010 objective of reducing the crude death rate from homicide to no more than 3.0 deaths per 100,000 residents.

The crude death rate from homicide is very similar in Contra Costa (6.3 per 100,000) and California (6.5 per 100,000).

African American men (76.4 per 100,000) **and men living in Richmond** (51.8 per 100,000) **are significantly more likely to die from homicide** compared to the county as a whole (6.3 per 100,000).

African American men are more likely to die from homicide

Homicide is the third leading cause of death among African American men.

African American men are 25 times as likely to die from homicide compared to other groups living in the county (RR = 24.8).

Over a three-year period 2000 to 2002, 183 Contra Costa residents, including 97 African American men, died from homicide. This means that **approximately 60 Contra Costa residents die from homicide each year**, and that over half of these deaths occur among African American men.

Table 50. Homicide by race/ethnicity and gender. Contra Costa, 2000 -2002

	Number of homicides			
	Men	Women	Total	Percent
African Americans	97	10	107	58.5%
Whites	25	12	37	20.2%
Hispanic/Latino	18	1	19	10.4%
Asian	10	4	14	7.7%
Contra Costa:	154	29	183	100%

[1]The Contra Costa total also includes the 6 homicides that occurred among people from two or more race groups and people whose race/ethnicity is unknown. These groups are excluded from the table due to small and unstable numbers (<10 homicides).

As shown above, most of the deaths from homicide occur among men (154), and a much smaller number occur among women (29). Most of the homicide deaths occur among African Americans (107), followed by Whites (37), Hispanic/Latinos (19) and Asians (14).

Men living in Richmond are more likely to die from homicide

Homicide is the third leading cause of death among men living in Richmond.

Men living in Richmond are 13 times as likely to die from homicide compared to other groups living in the county (RR = 13.0).

Table 51. Homicide in selected communities by gender. Contra Costa, 2000-2002

	Number of homicides			
	Men	Women	Total	Percent
Richmond	76	6	82	44.8%
Pittsburg	14	4	18	9.8%
San Pablo	14	3	17	9.3%
Antioch	11	3	14	7.7%
Contra Costa:	154	29	183	100%

[1]The Contra Costa total also includes the 52 homicides that occurred among people from other communities. These groups are excluded from the table due to small and unstable numbers (<10 homicides).

As shown above, nearly half of the homicides occur among people living in Richmond (82). This is followed by homicides among people living in Pittsburg (18), people living in San Pablo (17) and people living in Antioch (14).

Using this data to improve community health

In order to reduce both health disparities related to homicide and the overall number of deaths from homicide, it is important to focus interventions on African American men and men living in Richmond. These groups account for the highest number of deaths from homicide and they also have a much higher crude death rate from homicide compared to the county as a whole.

Interventions for homicide prevention could include strategies to limit youth access to firearms, deter gang involvement or teach skills to help people resolve conflicts through non-violent means.

Why do we use crude rates?

A crude rate controls for differences in population size and is a good summary statistic for comparing assault-related outcomes, like homicide, across groups of different sizes.

California's population is much larger than that of Contra Costa - we would expect California to have many more homicides. Rates allow us to see whether Contra Costa has proportionately more (or less) than its "fair share" of homicides. (See the methods section for more information about using rates.)

Continued...

In Contra Costa, there are many more Whites than African Americans, Latinos or Asians, and more people living in Concord or Richmond than in smaller communities such as Brentwood or Oakley. Again, rates allow us to compare the impact of homicide across groups of different sizes.

The differences highlighted above are statistically significant. This means that we are 95% certain that these differences are not due to chance alone.

What is a risk ratio (RR)?

A risk ratio is another way to compare homicide between population groups.

A risk ratio that is greater than 1.0 shows that there is an increased risk among the people in a particular group. With a risk ratio of 24.8, African American men are 25 times more likely to die from homicide compared to all other groups living in the county. (See the methods section for more information about using risk ratios.)

How to calculate the percentage and number of deaths

Percentages describe the proportion of countywide deaths from homicide that occur within a particular race/ethnic group or community. The percentage is calculated by dividing the number of deaths that occur within a specific race/ethnic group or community by the total number of deaths countywide and multiplying that number by 100.

Numbers show the actual number of deaths from each cause over a three-year period. The number of deaths per year can be calculated by dividing the total number of deaths from 2000-2002, as shown in the tables, by three.

Confidence intervals are available
You may download and view all detailed tables with 95% confidence intervals, at http://cchealth.org/health_data/hospital_council/

Data sources

Homicide data from the California Department of Health Services (CDHS), http://www.dhs.ca.gov/, Center for Health Statistics' Death Statistical Master File, 2000-2002. Any analyses, interpretations or conclusions of the data have been reached by CHAPE and are not from the CDHS.

Population data from the California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050, and E-4 Population Estimates for Cities, Counties, and the State, 2001-2004, with DRU Benchmark, available online at: http://www.dof.ca.gov/HTML/DEMOGRAP/Druhpar.htm. Sacramento, California, May 2004.

Note: City-level denominators were extrapolated from the E-4 file to approximate the mid-year city-level population estimates that are needed to calculate city-level rates. For more information, please see our section on statistical methods.

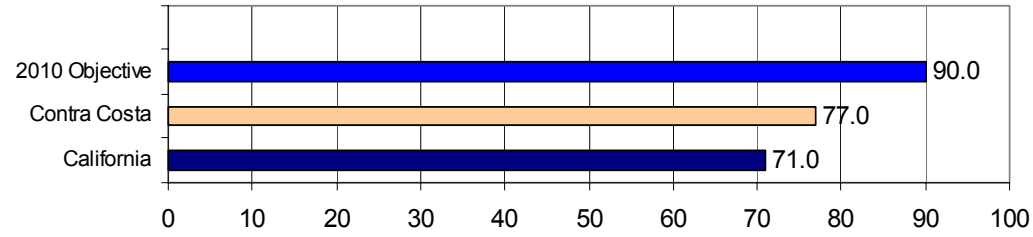
ICD10 coding for homicide (ICD X85-Y09, Y87.1) from the Centers for Disease Control and Prevention National Center for Health Statistics, available online at: http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_16.pdf.

Healthy People 2010 objectives from the US Department of Health and Human Services' Office of Disease Prevention and Health Promotion, available online at http://www.healthypeople.gov/.

Childhood Immunizations & Vaccine Preventable Diseases

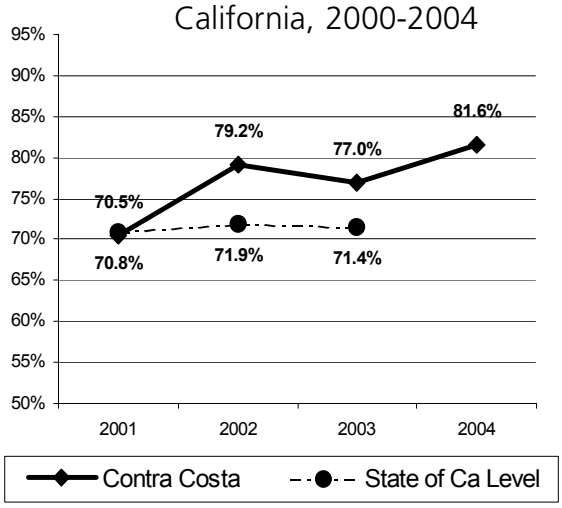
Despite recent improvements, Contra Costa has not met the Healthy People 2010 objective of having at least 90% of all two year olds fully immunized.

Figure 13. Percent of fully immunized two-year olds, Contra Costa and California, 2003



The county rate is much better than the state's but is well below the Healthy People 2010 objective 90%.

Figure 14. Two-Year Olds With All Their Shots, Contra Costa and California, 2000-2004



The estimated rate of immunizations in Contra Costa has improved from 70.5% in 2001 to 81.6% in 2004.

Immunization is among the most effective preventive measures known.

Vaccines protect against diseases such as polio, measles, pertussis and hepatitis. Vaccines not only protect the immunized child, but the community as well.

Hepatitis B (chronic) **is the most common vaccine-preventable disease among children in Contra Costa followed by whooping cough** (pertussis).

"Chronic" hepatitis is clinically defined by greater than six months of positive test results. Most children with hepatitis are born to mothers with the chronic form of the disease.

California requires that children be up-to-date on their shots before entering kindergarten and seventh grade, and before enrolling in licensed childcare programs.

Nationally, according to the Centers for Disease Control and Prevention, the number of new Hepatitis B infections per year has declined in the U.S. from an average of 260,000 in the 1980s to about 78,000 in 2001.

Although Hepatitis B is common in children, the highest rate of disease occurs in 20-49 year-olds.

The decline in the number of cases among children and adolescents is due to successful Hepatitis B vaccination programs.

Table 52. Childhood Vaccine-Preventable Disease Cases, Contra Costa, 1999-2003

Vaccine-Preventable Disease1	5 Year Total
Hepatitis B (Chronic)	60
"Whooping Cough" (Pertussis)	43
Measles	2
Mumps	2

Between 1999 and 2003 there were no reported cases of diptheria, polio, rubella or tetanus for children less than 19 years old.

Richmond (12), Pittburg (8) and Concord (6) had the greatest number of cases of "whooping cough" (pertussis) among children.

Table 53. Pertussis, Cases By Community. 1999-2003

	Cases of Pertussis
Richmond	12
Pittsburg	8
Concord	6
San Pablo	5
Walnut Creek	5
Antioch	3
Brentwood	2
Oakley	2
Bay Point	0
Martinez	0
Pinole	0

California has seen an unusually high number of whooping cough cases since the year 2000 (Contra Costa Times, 2004). Not all cases are severe, but many are.

More than one-third occurred in infants less than three months old. Eighty percent of these infants were so sick they needed hospitalizations.

Complications include vomiting, pneumonia, seizures, brain damage and, in a few cases, death. The disease causes violent coughing spasms that can last several minutes and persist for months, making it very difficult for an infant to eat, drink and breathe.

Whooping cough can easily be prevented

"Whooping cough" is vaccine-preventable using what is known as the DtaP vaccine, which is recommended at two months of age, followed by three additional injections by the time a child is eighteen months old. Newborns are particularly vulnerable to whooping cough so it is important not to delay the first shot.

How to calculate the percentage of immunized children

The percentage describes the proportion of kindergartners who are fully immunized. *(See Data Sources below)*.

The percentage is calculated by dividing the number of kindergartners who are fully immunized by the total number of kindergartners in the county or state, then multiplying by 100.

$$\frac{\text{Total Immunized}}{\text{Total in County/State}} \times 100$$

How to calculate numbers of cases of vaccine-preventable disease

The above analysis is based on the number of reported cases of vaccine-preventable disease among children less than 19 years old in the five-year period between January 1999 and December 2003.

Because vaccine-preventable disease is rare and actual numbers are small, only reported cases were used for this analysis.

Data sources

Local data about immunization levels is analyzed by the Immunization Branch of the State Department of Health Services (DHS). A random survey of schools is used to assess the immunization levels of students in kindergarten. DHS uses these immunization records to estimate the percentage of children who were up-to-date when they were two years old. For example, the 2004 vaccination records of 5 year olds (kindergartners) are used to estimate immunization coverage for the years 2000-2001.

In the analysis above, local data about vaccine-preventable disease is derived from our Contra Costa County's Automated Vital Statistics System or AVSS.

For more information about communicable disease in Contra Costa please contact Juan Reardon, MD, MPH, jreardon@igc.org, or Martin Lynch by phone at (925) 313-6323. You can also visit the unit's page at http://www.co.contra-costa.ca.us.

Any analyses, interpretations or conclusions of the data, unless specified, have been reached by CHAPE and are not from the CA Department of Health Services, Immunization Branch.

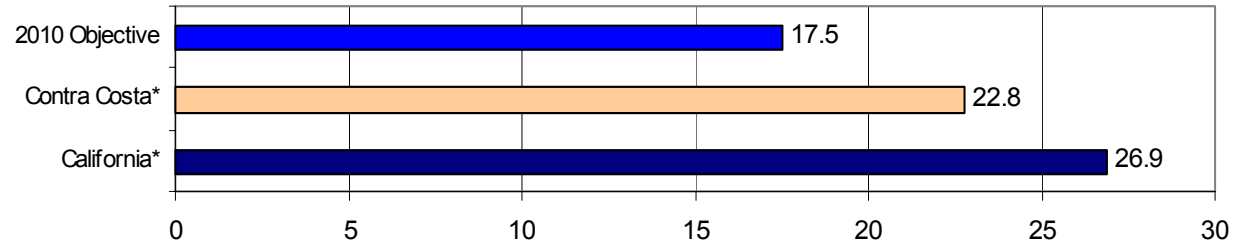
For more information call Contra Costa Health Service's Community Health Assessment, Planning & Evaluation (CHAPE) Group at (925) 313-6171.

[1] Hepatitis B information was not available by community.

Unintentional Injury – Overview

Contra Costa has not met the Healthy People 2010 objective of reducing the crude death rate from unintentional injury (accidents) to no more than 17.5 deaths per 100,000 residents.

Figure 15. Unintentional injury deaths per 100,000 residents



[*] Indicates that the crude death rates for Contra Costa and California are significantly higher than the 2010 Objective. Contra Costa and California statistics were calculated for the three-year period 2000-2002.

Unintentional injury is the fifth leading cause of death

In Contra Costa, unintentional injury (accidents) accounts for 3% of all deaths. Over a three-year period 2000 to 2002, there were 666 Contra Costa residents that died from unintentional injuries. This means that **approximately 220 Contra Costa residents die from unintentional injury each year**.

The crude death rate from unintentional injury is lower in Contra Costa (22.8 per 100,000) than California (26.9 per 100,000).

People living in San Pablo are more likely to die from unintentional injury compared to the county overall. This difference is not due to the age of the population and is likely due to environmental risk or unhealthy behaviors.

San Pablo has a much higher rate

Table 54. Unintentional injury deaths in selected communities. Contra Costa, 2000-2002

	Rate	Percent	(Number)
San Pablo	*44.8	6%	(41)
Martinez	35.6	6%	(39)
Oakley	28.1	3%	(22)
Concord	25.8	14%	(96)
Richmond	25.8	12%	(78)
Pittsburg	25.5	7%	(45)
Antioch	24.3	10%	(69)
Walnut Creek	20.3	6%	(40)
Contra Costa:	**22.8**	**100%**	**(666)**

[*] Indicates that the crude death rate (per 100,000) is significantly higher for people living in San Pablo compared to Contra Costa as a whole.
Due to small numbers (<20 deaths), rates could not be calculated for Bay Point, Brentwood and Pinole.

A large number of the deaths from unintentional injury occur among people living in Concord (96, 14%), followed by people living in Richmond (78, 12%), Antioch (69, 10%), Pittsburg (45, 7%), San Pablo (41, 6%), Walnut Creek (40, 6%) and Martinez (39, 6%).

Latinos and Asians have a lower risk

The crude death rate from unintentional injury is lower among Latinos and Asians, and similar among African Americans, Whites and the county overall.

Table 55. Unintentional injury deaths by race/ethnicity. Contra Costa, 2000-2002

	Rate	Percent	(Number)
African American	29.1	13%	(84)
White	26.3	65%	(435)
Latino	15.3	13%	(84)
Asian	12.2	7%	(48)
Contra Costa:	**22.8**	**100%**	**[1](666)**

[1]The Contra Costa total also includes the 15 deaths that occurred among people from other race/ethnic groups such as Native American and Alaska Natives, Native Hawaiians and Pacific Islanders and people from two or more race groups. Due to small numbers (<20 deaths), rates could not be calculated for these groups.

The majority of deaths from unintentional injury occur among Whites (435, 65%), followed by African Americans (84, 13%), Latinos (84, 13%) and Asians (48, 7%).

Most common causes of unintentional injury death

The leading causes of unintentional injury death include car crashes, poisoning/drug overdose, falls, drowning and choking. For more information about how these causes of death vary by age group, please see the next section.

Using this data to improve community health

In order to reduce health disparities (differences), it is important to target the groups with the highest death rates from a given cause. For unintentional injury, these are people living in San Pablo.

In order to reduce the overall number of deaths in the county, without regard to health disparities, it may be better to target interventions to the groups that account for the highest percent of deaths from a given cause. For unintentional injury, these are Whites, African Americans, Latinos, and people living in Concord, Richmond and Antioch.

Interventions to address unintentional injury could include getting more people to wear seat belts, putting in fences around pools or promoting the California Poison Control System Statewide Emergency 24 Hour Hotline.

Why do we use crude rates?

A crude rate controls for differences in population size and is a good summary statistic for comparing health outcomes like unintentional injury across groups of different sizes.

California's population is much larger than that of Contra Costa - we would expect California to have many more deaths from unintentional injury. Rates allow us to see whether Contra Costa has proportionately more (or less) than its "fair share" of deaths from unintentional injury. (See the methods section for more information about using rates.)

In Contra Costa, there are many more Whites than African Americans, Latinos or Asians, and more people living in Concord or Richmond than in smaller cities such as Brentwood or Oakley. Again, rates allow us to compare the impact of unintentional injury across groups of different sizes.

The differences highlighted above are statistically significant. This means that we are 95% certain that these differences are not due to chance.

How to calculate the percentage and number of deaths

Percentages describe the proportion of countywide deaths from unintentional injury that occur within a particular community or race/ethnic group. The percentage is calculated by dividing the number of deaths that occur within a specific community or race/ethnic group by the total number of deaths countywide and then multiplying that number by 100.

Numbers show the actual number of deaths from unintentional injury over a three-year period. **The number of deaths per year can be calculated by dividing the total number of deaths from 2000-2002 by three**.

Confidence intervals are available
You may download and view all detailed tables with 95% confidence intervals, at… http://cchealth.org/health_data/hospital_council/

Data sources

Mortality data from the California Department of Health Services (CDHS), http://www.dhs.ca.gov/, Center for Health Statistics' Death Statistical Master File, 2000-2002. Any analyses, interpretations or conclusions of the data have been reached by CHAPE and are not from the CDHS.

Population data from the California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050, and E-4 Population Estimates for Cities, Counties and the State, 2001-2004, with DRU Benchmark, available online at: http://www.dof.ca.gov/HTML/DEMOGRAP/Druhpar.htm. Sacramento, California, May 2004.

Note: City-level denominators were extrapolated from the E-4 file to approximate the mid-year city-level population estimates that are needed to calculate city-level rates. For more information, please see our section on statistical methods.

ICD10 coding for unintentional injury (ICD V01-X59, Y85-Y86) from the Centers for Disease Control and Prevention National Center for Health Statistics, available online at: http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_16.pdf.

Healthy People 2010 objectives from the US Department of Health and Human Services' Office of Disease Prevention and Health Promotion, available online at http://www.healthypeople.gov/.

Unintentional Injury – Causes

Residents age 65 and over are more likely to die from falls and residents age 21 - 44 years are more likely to die from unintentional poisoning (often drug overdoses).

In Contra Costa, the leading causes of unintentional injury death are car crashes, poisoning, falls, drowning and choking/ suffocation. **The ranking of these causes of unintentional injury death vary by age group**.

Over a three-year period 2000-2002, there were 666 unintentional injury deaths among Contra Costa residents. This means that **approximately 220 Contra Costa residents die from unintentional injury each year**.

The crude death rate for unintentional injury among all age groups was 22.8 per 100,000 residents.

Table 56. Most common causes of unintentional injury death. Contra Costa, 2000- 2002

	Deaths	Rate
1. Car crashes	224	7.7
2. Poisoning	158	5.4
3. Falls	92	3.2
4. Drowning	40	1.4
5. Choking/suffocation	25	0.9

Rates are crude death rates per 100,000 residents.

Age 65+

Over a three-year period 2000-2002, there were 171 unintentional injury deaths among Contra Costa residents age 65 and over. The crude death rate for unintentional injury was also higher among adults in this age group (52.0 per 100,000) than for all age groups combined (22.8 per 100,000).

Older residents are more likely to die from an injury because their bodies are less able to sustain or recover from an injury such as the physical impact of a car crash or fall.

Falls and car crashes are the leading causes of unintentional injury death among Contra Costa residents age 65 and over. The crude death rate for falls was higher among residents age 65 and over (21.0 per 100,000) than for all age groups combined (3.2 per 100,000).

Table 57. Most common causes of unintentional injury death for residents age 65+. Contra Costa, 2000- 2002

	Deaths	Rate
1. Falls	69	*21.0
2. Car crashes	41	12.5

[*] Indicates that the death rate (per 100,000) from falls is significantly higher among residents age 65 and over compared to all age groups combined.
Due to small and unstable counts (<20 deaths), the 21 unintentional injury deaths from other causes are not shown in this table. Rates are crude death rates per 100,000 residents.

Age 45- 64 years

Poisoning and car crashes are the leading causes of unintentional injury death among Contra Costa residents age 45- 64 years.

Over a three-year period 2000-2002, there were a total of 162 unintentional injury deaths among Contra Costa residents age 45- 64 years. The crude death rate for unintentional injury was 22.8 per 100,000 among adults in this age group.

Table 58. Most common causes of unintentional injury death for residents age 45-64 years. Contra Costa, 2000-2002

	Deaths	Rate
1. Poisoning	65	9.1
2. Car crashes	47	6.6

Due to small and unstable counts (<20 deaths), the 50 unintentional injury deaths from other causes are not shown in this table.

Rates are crude death rates per 100,000 residents.

Age 21- 44 years

Car crashes and poisoning are the leading causes of unintentional injury death among Contra Costa residents age 21-44 years.

The crude death rate for unintentional poisoning was higher among residents age 21-44 years (8.8 per 100,000) than for all age groups combined (5.4 per 100,000). Most of these deaths from unintentional poisoning were due to drug overdoses.

Over a three-year period 2000-2002, there were 235 unintentional injury deaths among Contra Costa residents age 21-44 years. The crude death rate for unintentional injury was 23.5 per 100,000 among adults in this age group.

Table 59. Most common causes of unintentional injury death for residents age 21-44 years. Contra Costa, 2000-2002

	Deaths	Rate
1. Car crashes	90	9.0
2. Poisoning	88	*8.8

[*] Indicates that the death rate (per 100,000) from unintentional poisoning is significantly higher among residents age 21-44 years compared to all age groups combined.
Due to small and unstable counts (<20 deaths), the 57 unintentional injury deaths from other causes are not shown in this table. Rates are crude death rates per 100,000 residents.

Age 0-20 years

Car crashes and drowning are the leading causes of unintentional injury death among Contra Costa residents age 0-20 years. Residents who die in car crashes can include drivers, passengers, bicyclists and pedestrians.

Over a three-year period 2000-2002, there were 87 unintentional injury deaths among Contra Costa residents age 0-20 years. **The crude death rate for unintentional injury was lower among residents age 0- 20 years** (9.9 per 100,000) than for all age groups combined (22.8 per 100,000).

Table 60. Common causes of unintentional injury death for residents age 0- 20 years.
Contra Costa, 2000- 2002

	Deaths	Rate
1. Car crashes	46	5.2
2. Drowning	20	2.3

Due to small and unstable counts (<20 deaths), the 21 unintentional injury deaths from other causes are not shown in this table.

Rates are crude death rates per 100,000 residents.

Why do we use crude rates?

A crude rate controls for differences in population size and is a good summary statistic for comparing outcomes like unintentional injury or homicide across groups of different sizes.

For example, we expect to see many more unintentional injury deaths in California than in Contra Costa because the population of California is so much larger than the population of Contra Costa County. A crude rate allows us to compare the impact of unintentional injury across groups of different sizes. (See the methods section for more information about using rates.)

The differences highlighted above are statistically significant. This means that we are 95% certain that these differences are not due to chance.

How to calculate the number of deaths

Numbers show the actual number of unintentional injury deaths from each cause over a three-year period. The number of deaths per year can be calculated by dividing the total number of deaths from 2000-2002 by three.

Confidence intervals are available
You may download and view all detailed tables with 95% confidence intervals, at http://cchealth.org/health_data/hospital_council/

Data sources

Mortality data from the California Department of Health Services Epidemiology and Prevention for Injury Control (EPIC) branch, Data Summaries: Injuries by Cause and Age, available online at: http://www.dhs.ca.gov/epic/. Any analyses, interpretations or conclusions of the data have been reached by CHAPE and are not from the CDHS.

Population data from the California Department of Finance, Race/ Ethnic Population with Age and Sex Detail, 2000-2050, with DRU Benchmark, available online at: http://www.dof.ca.gov/HTML/DEMOGRAP/Druhpar.htm. Sacramento, California, May 2004.

Note: City-level denominators were extrapolated from the E-4 file to approximate the mid-year city-level population estimates that are needed to calculate city-level rates. For more information, please see our section on statistical methods.

ICD10 coding for unintentional injury (ICD V01-X59, Y85-Y86) from the Centers for Disease Control and Prevention National Center for Health Statistics, available online at: http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_16.pdf.

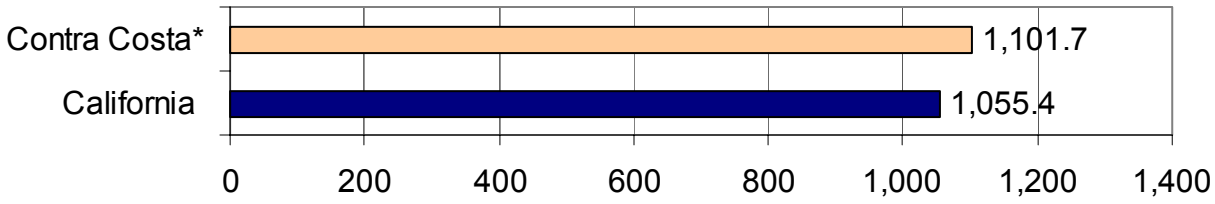
Healthy People 2010 objectives from the US Department of Health and Human Services' Office of Disease Prevention and Health Promotion, available online at http://www.healthypeople.gov/.

Mental Disorders – Hospitalizations

More than 10,000 in-patient hospital treatments for mental disorders are provided to Contra Costa residents each year.

People in living in Contra Costa are more likely than people living in California to receive hospital treatment for **mental disorders such as depression, anxiety, attention deficit disorder, autism, mental retardation, schizophrenia and dementia.**

Figure 16.



[*] Indicates that the crude rate per 100,000 of hospital treatment for mental disorders is significantly higher in Contra Costa than in California.

Over a three-year period 2000-2002, there were 32,186 hospital treatments for mental disorders among Contra Costa residents. This means that **approximately 10,730 in-patient hospital treatments for mental disorders are provided to Contra Costa residents each year.** (Please see note on interpreting this data later in this section.)

Whites, African Americans, and people living in Walnut Creek, Martinez, Concord and Richmond and San Pablo are more likely to receive hospital treatment for mental disorders compared to the county overall.

White residents most often receive treatment for mental disorders

Whites (1492.2 per 100,000) and **African Americans** (1216.1 per 100,000) **are more likely to receive hospital treatment** for mental disorders compared to Contra Costa as a whole.

Table 61. Hospital treatments for mental disorders by race/ethnicity. Contra Costa, 2000-2002

	Rate	Number
White	*1,492.2	24,724
African American	*1,216.1	3,509
Hispanic/Latino	362.7	1,992
Asian/Other Pacific Islander	291.5	1,143
American Indian/ Alaska Native	115.8	40
Contra Costa	1,101.7	32,186[1]

[*] Indicates that the crude rate per 100,000 of hospital treatments for mental disorders is significantly higher for Whites and African Americans compared to the county as a whole.
[1]The Contra Costa total also includes the 778 hospital treatments for mental disorders that occurred among people from other race/ethnic groups or whose race/ ethnicity was unknown.

The majority of the hospital treatments for mental disorders occurred among Whites (24,724), **followed by African Americans** (3,509), Hispanic/ Latinos (1,992) and Asian/Other Pacific Islanders (1,143).

Some communities have higher rates of treatment

People living in Walnut Creek, Martinez, Concord, and Richmond and San Pablo are more likely to receive hospital treatment for mental disorders compared to the county overall.

Table 62. Hospital treatments for mental disorders in selected communi ties. Contra Costa, 2000-2002

	Rate	Number
Walnut Creek	*1,980.7	3,901
Martinez	*1,737.0	1,902
Concord	*1,330.3	4,943
Richmond and San Pablo	*1,244.3	4,897
Pittsburg and Bay Point	1,069.7	2,605
Antioch	994.6	2,830
Pinole	966.4	561
Oakley	850.1	665
Brentwood	798.3	655
Contra Costa	1,101.7	32,186

[*] Indicates that the crude rate per 100,000 of hospital treatments for mental disorders is significantly higher for people living in Walnut Creek, Martinez, Concord, and Richmond and San Pablo compared to people living in Contra Costa as a whole.
[1]Due to shared zip codes, the communities of Pittsburg and Bay Point, and Richmond and San Pablo have been combined for this analysis.

People living in Concord have the highest number of hospital treatments for mental disorders (4,943), followed by people living in Richmond and San Pablo (4,897), Walnut Creek (3,901), Antioch (2,830), Pittsburg and Bay Point (2,605) and Martinez (1,902).

Nationally, mental health remains an important issue. According to the National Center on Health Statistics, in 2001 there were 44.8 million visits to office-based physicians for mental disorders and in 2002 there were two million hospital emergency department visits.

Using this data to improve community health

For the purposes of improving community health, hospitalization data is particularly hard to interpret because it reflects only the hospitalized (and often extreme) cases of mental disorder, does not take into account an individual's ability to access care and does not provide a count of unique individuals. For these reasons, **hospitalization for mental health treatment is not a good indicator of prevalence (rate of cases in a population) of mental disorders.** Hospitalization data can however provide information about how hospital services are distributed in a population by place and race/ethnicity and do allow us to track that distribution over time.

Interventions to address mental disorders could include creating more opportunities for mental health counseling, improving access for non-English speaking clients and providing more low-cost community mental health treatment and support services. Access to services remains a challenge in improving mental health.

Why are crude rates important?

A crude rate controls for differences in population size and is a good summary statistic for comparing hospital treatments for mental disorders across groups of different sizes.

For example, we expect to see many more hospital treatments for mental disorders in California than in Contra Costa, and this is because the population of California is so much larger than the population of Contra Costa County. Rates allow us to see if Contra Costa County has proportionally more (or less) of its "fair share" of hospital treatments. (For more information, see the Methods section at the back of the report.)

In Contra Costa, there are many more Whites than African Americans, Latinos or Asians, and more people living in Richmond and San Pablo or Concord than in smaller communities such as Brentwood or Oakley.

The differences highlighted above are statistically significant. This means that we are 95% certain that these are true differences and not due to chance.

Interpreting this data

The above statistics present the number and rate of in-patient hospital treatments for mental disorders per 100,000 residents.

The statistics apply only to in-patient hospital diagnosis of treatment for a mental disorder and do not include treatment that takes place in a doctor's office, health clinic or emergency room. The statistics include any in-patient hospital diagnosis of treatment for a mental disorder, regardless of whether a mental disorder was that person's primary reason for being hospitalized. A single person can be counted multiple times for multiple in-patient diagnoses of treatment for a mental disorder.

The statistics indicate that some groups and communities are more likely to receive hospital treatment for mental disorders compared to the county as a whole. **They do not tell us whether the increased rate of hospitalization is due to a large rate of people successfully obtaining treatment for mental disorders, or to a disproportional need for mental health treatment among certain people in that group or community.**

It is difficult to know whether a person may be more or less likely to seek hospital treatment if they have health insurance. A person without health insurance may avoid seeking hospital treatment if they do not have insurance or money to cover their care. On the other hand, a person without health insurance may be more likely to be hospitalized if they delay or forgo preventive care.

Confidence intervals are available
You may download and view all detailed tables with 95% confidence intervals, at…
http://cchealth.org/health_data/hospital_council/

Zip code boundaries

We selected the zip codes that "best fit" each of the communities listed above. For this analysis, the zip codes are as follows: Antioch (94509 and 94531), Brentwood (94513), Concord (94518, 94519, 94520 and 94521), Martinez (94553), Oakley (94561), Pinole (94564), Pittsburg and Bay Point (94565), Richmond and San Pablo (94801, 94803, 94804, 94805 and 94806) and Walnut Creek (94595, 94596, 94598). Due to shared zip codes, the communities of Pittsburg and Bay Point, and Richmond and San Pablo, were combined.

Data sources

Hospitalization data from the California Office of Statewide Health Planning and Development, http://www.oshpd.ca.gov/, Healthcare Quality and Analysis Division, Healthcare Information Resource Center.
Note: For this section, race/ethnic population estimates were reallocated to account for the fact that the hospitalization dataset does not include the race/ethnic category of two or more race groups. For more information, see the Methods section at the back of the report.

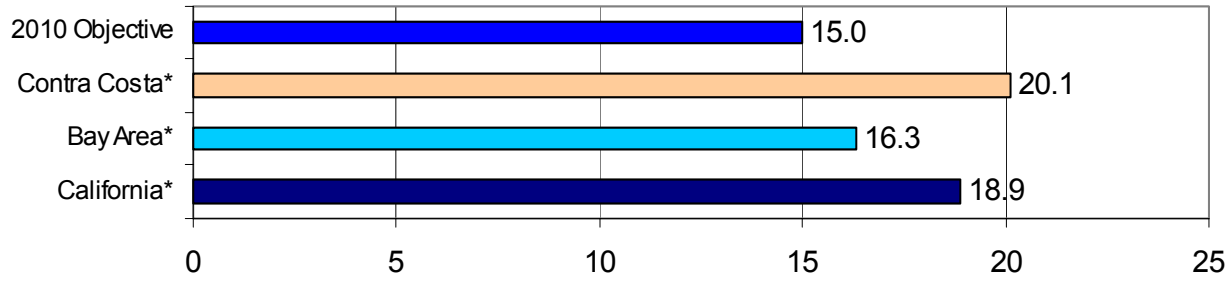
Population data from the California Department of Finance, Race/ Ethnic Population with Age and Sex Detail, 2000-2050, and E-4 Population Estimates for Cities, Counties, and the State, 2001-2004, with DRU Benchmark, available online at: http://www.dof.ca.gov/HTML/DEMOGRAP/Druhpar.htm. Sacramento, California, May 2004.
Note: City-level denominators were extrapolated from the E-4 file to approximate the mid-year city-level population estimates that are needed to calculate city-level rates. For more information, please see our section on statistical methods.

ICD9 coding for mental disorders (053.13, 290.0, 290.20, 290.21, 290.40, 291.0, 293.0, 295.02, 295.12, 295.32, 295.72, 295.90, 296.22, 296.42, 296.52, 298.0, 298.1, 298.3, 298.9, 299.00, 300.00, 300.01, 300.02, 300.10, 300.11, 300.21, 300.23, 300.3, 300.4, 300.81, 300.9, 301.3, 301.6, 301.7, 301.83, 301.9, 302.70, 302.71, 302.72, 302.75, 302.76, 306.8, 307.0, 307.1, 307.41, 307.42, 307.45, 307.46, 307.51, 307.52, 307.6, 307.7, 308.3, 309.0, 309.24, 309.81, 311, 312.34, 312.9, 314.00, 314.01, 315.02, 315.9, 317, 319, 331.0, V61.10, V61.20, V65.42, V62.82) from the American Academy of Family Physicians Website, ICD-9 Codes for Family Practice 2000-2001: The FPM Long List, available online @ http://www.aafp.org/fpm/20000900/icd9_long.html.

Obesity in Adults

Contra Costa has not met the Healthy People 2010 objective of reducing the proportion of adults who are extremely overweight (obese) to no more than 15%.

Figure 17. Percent of adults that are obese, 2001



[*] Indicates that the percentage of adults who are obese is higher in Contra Costa, the Bay Area and California than the 2010 objective.

African Americans are twice as likely to be obese

In Contra Costa, **approximately 135,000 adults are considered obese**.

The proportion of adults who are obese (19-20%) is virtually the same in Contra Costa and California, and slightly lower (16%) in the Bay Area.

The local data shows that **African Americans (31.6%) and Latinos (21.2%) are more likely to be obese** compared to the Bay area overall (16.3%).

Table 63. Adults who are obese by race/ethnicity, Bay Area Counties, 2001[1]

	Percent obese	Number
African American	*31.6%	103,000
Latino	*21.2%	135,000
White	16.8%	475,000
Asian	5.9%	58,000
Bay Area Counties	16.3%	803,000[2]

[*] Indicates that African Americans and Latinos are significantly more likely to be obese compared to the Bay Area overall.

[1]Due to the small number of survey responses in Contra Costa, the race/ethnic estimates combine data from the nine Bay Area Counties: Alameda, Contra Costa, Marin, Napa, Santa Clara, San Francisco, San Mateo, Solano and Sonoma.

[2]The Bay Area total also includes the 32,000 Native American/Alaska Native adults and adults from other single/two or more race groups who are obese. Reliable Bay Area estimates were not available for these groups.

More than half of the adults who are obese are White (475,000). Smaller numbers of Latinos (135,000), African Americans (103,000) and Asians (58,000) are obese.

We can predict more people with weight and health problems

The percentage of people who are overweight and obese has increased steadily throughout the past 20 years, and this trend is expected to continue.

People who are overweight and obese are more likely to be depressed and to have chronic diseases such as arthritis, breathing problems, diabetes, certain types of cancer, heart disease and stroke.

State-level data shows that obesity is more common among American Indian/Alaska Natives, African Americans and Latinos, as well as among people with incomes below 200% of the federal poverty level. Among African Americans, women are more likely than men to be obese, although both groups have a higher risk compared to the population overall. This gender difference was not seen among American Indian/ Alaska Natives or Latinos.

Using this data to improve community health

In order to reduce health disparities (differences), it is important to target interventions to the groups that are most at risk for extreme overweight/obesity. In Contra Costa, these are African Americans, Latinos and possibly American Indians/Alaska Natives.

Examples of health interventions include strategies to increase community access to fruits and vegetables, promote healthy foods and recipes or develop walking clubs in the community.

The race/ethnic differences that have been highlighted above are statistically significant. This means that we are 95% certain that these differences are not due to chance.

What is obesity?

Adults are considered obese if they have a body mass index (BMI) of 30.0 or higher. A person can calculate their own BMI by dividing their weight (in pounds) by their height squared (in inches) and then multiplying the result times 703.

$$\text{BMI} = \frac{\text{Weight (in pounds)}}{\text{Height (in inches)} \times \text{Height (in inches)}} \times 703$$

An online BMI calculator is available through the Centers for Disease Control and Prevention website at http://www.cdc.gov/nccdphp/dnpa/bmi/calc-bmi.htm.

Confidence intervals are available
You may download and view all detailed tables with 95% confidence intervals, at… http://cchealth.org/health_data/hospital_council/

Data sources

Local data about obesity from the California Health Interview Survey's AskCHIS data query system, copyright (c) 2003 by the Regents of the University of California, all rights reserved, available online at http://www.chis.ucla.edu/.

These statistics are generated from a telephone survey that asks questions to a randomly selected group of adults in Contra Costa and other counties in California.

These statistics are estimates and we expect that these estimates will be slightly different each time the survey is conducted. As such, we do not recommend using these estimates for evaluation purposes.

Healthy People 2010 objectives from the US Department of Health and Human Services' Office of Disease Prevention and Health Promotion, available online at http://www.healthypeople.gov/.

Information about trends and health conditions associated with overweight and obesity from the CDC's National Center for Chronic Disease Prevention and Health Promotion, available online at http://www.cdc.gov/nccdphp/dnpa/obesity/.

Information about state trends from the California Health Interview Survey's AskCHIS data query system, copyright (c) 2003 by the Regents of the University of California, all rights reserved, available online at http://www.chis.ucla.edu/.

Overweight Children

Nearly one-third of Contra Costa's fifth graders are overweight. In some schools the rate is much greater.

According to the California Department of Education, Standards and Assessment Division, **31% of Contra Costa fifth graders are overweight**. This means that there are **approximately 11,764 overweight fifth graders** attending schools in this county.

During the 2002-03 school year, all fifth graders in California were required to take the California Physical Fitness Test, which included measurements of body fat composition.

As a whole, fifth graders in Contra Costa (31%) are less likely to be overweight than students in California (33%).

Fifth graders in the Byron Unified (47%), Pittsburg Unified (46%) and West Contra Costa Unified (42%) school districts are more likely to be overweight compared to the county overall.

Table 64. Fifth graders who are over weight, Contra Costa, 2002-2003

Area:	Percent overweight	Number
Byron Union Elementary	*47%	142
Pittsburg Unified	*46%	737
West Contra Costa Unified	*42%	2,573
Antioch Unified	33%	1,587
Knightsen Elementary	30%	44
Martinez Unified	29%	287
San Ramon Valley Unified	29%	1,646
John Swett Unified (Rodeo)	27%	137
Mt. Diablo Unified	26%	2,836
Oakley Union Elementary	21%	480
Walnut Creek Elementary	18%	357
Orinda Union Elementary	17%	275
Lafayette Elementary	14%	414
Moraga Elementary	11%	218
Contra Costa Total:	31%	11,764

[*] Indicates that the proportion of overweight fifth graders is significantly higher in these school districts compared to Contra Costa overall.
These statistics include districts that tested 25 or more fifth graders during the 2002-2003 school year.

The greatest number of overweight students can be found in Central County's Mt. Diablo Unified school district (2,836),

followed by the West Contra Costa Unified (2,573), San Ramon Valley Unified (1,646) and Antioch Unified (1,587) school districts.

This problem is getting worse

The percentage of children who are extremely overweight/obese has increased steadily throughout the past 20 years, and that trend is expected to continue.

Most Bay Area adults (69%) say that being overweight or obese is a major problem facing children and teens today, but only 13% say that it is their biggest problem.

Current habits can impact future health

It has been estimated that **one half of overweight school-age children will remain overweight as adults**. People who are overweight or obese are more likely to be depressed and to have chronic diseases like arthritis, breathing problems, diabetes, certain types of cancer, heart disease and stroke.

When Bay Area adults were asked about the major reasons why children and teens are overweight, their top answers were that **children and teens do not exercise regularly** (89%), that fast **food restaurants** and food companies make too much unhealthy food (54%) and that **too much advertising** is aimed at children and teens (45%).

The vast majority of Bay Area adults do not think schools should allow vending machines (58%), soda machines (66%), fast food restaurants (81%) or junk food advertisements (83%).

Using this data to improve community health

In order to reduce health disparities (differences), it is important to target the school districts with the highest percent of overweight children. For fifth graders in Contra Costa, these are the Byron Unified, Pittsburg Unified and West Contra Costa Unified school districts.

In order to decrease the overall number of overweight children, without regard to health disparities, it may be better to target interventions to the school districts with the highest number of overweight students. For fifth graders in Contra Costa, these are the Mount Diablo Unified, West Contra Costa Unified, San Ramon Valley Unified and Antioch Unified school districts.

Examples of health programs to address childhood overweight include expanding physical education, limiting fast food and soda sold in vending machines at schools or educating parents about how to shop for and prepare healthy foods.

What is overweight?

A person is considered overweight if their body mass index is between 24 and 29.9. A person can calculate their own BMI by dividing their weight (in pounds) by their height squared (in inches) and then multiplying the result times 703.

$$\text{BMI} = \frac{\text{Weight (in pounds)}}{\text{Height (in inches)} \times \text{Height (in inches)}} \times 703$$

An online BMI calculator is available through the Center for Disease Control and Prevention website at http://www.cdc.gov/nccdphp/dnpa/bmi/calc-bmi.htm.

Confidence intervals are available
You may download and view all detailed tables with 95% confidence intervals, at…
http://cchealth.org/health_data/hospital_council/

Data sources

Data about overweight children was compiled by the California Department of Education, Standards and Assessment Division, and is available online at http://data1.cde.ca.gov/dataquest/. For more information about the definition of "overweight," please visit the website listed above. The definitions used in this study are identical to the ones used by the California Center for Health Policy Research and different from the ones used by the Centers for Disease Control and Prevention (CDC).

Information about trends and health conditions associated with being overweight or obese from the CDC's National Center for Chronic Disease Prevention and Health Promotion, available online at http://www.cdc.gov/nccdphp/dnpa/obesity/.

Information about national trends from the National Heart, Blood, and Lung Institute Obesity Education Initiative Expert Panel. Clinical Guidelines on the identification, evaluation, and treatment of overweight and obesity in adults. Washington, DC, 1998.

Information about the proportion of overweight school children who remain overweight as adults from Serdula MK, Ivery D, Coates RJ, Freedman DS, Williamson DF and Beyers T. Do obese children become obese adults? A review of the literature. Preventive Medicine 1993; 22; 167-177.

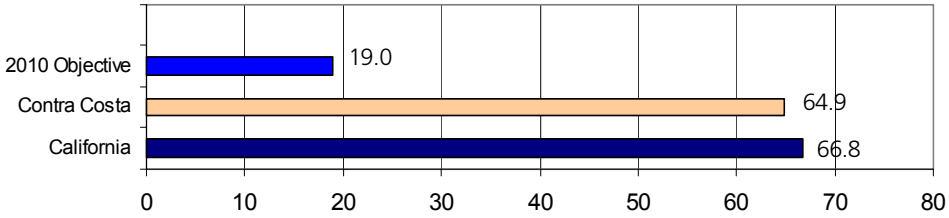
Information about Bay Area views on children who are overweight or obese was compiled by the San Jose Mercury News/Kaiser Family Foundation. The detailed findings are available online at http://www.kff.org. In November and December 2003, the San Jose Mercury News/Kaiser Family Foundation conducted a telephone survey among a representative sample of 1,175 randomly selected adults from Alameda, Contra Costa, Marin, Napa, San Francisco, Santa Clara, San Mateo, Sonoma and Solano counties. This sample included 292 parents with children from kindergarten through the 12th grade.

Sexually Transmitted Diseases (STDs)

Contra Costa has not met the Healthy People 2010 objective for gonorrhea. The rates of sexually transmitted diseases are greatest among young people age 15-24.

Contra Costa's gonorrhea rates are not statistically different than the State's. Both Contra Costa and California have gonorrhea rates several times that of the Healthy People 2010 objective.

Table 18. Gonorrhea rate per 100,000, 2000-2002



Young people most likely to be infected

Locally, the rates of chlamydia are greatest among young adults between the ages of 20-24 (1355.2 per 100,000) and 15-19 (1195.1 per 100,000). There are also infections among those younger than 15 years, with approximately 52 cases of chlamydia per year.

Although Contra Costa has high rates of chlamydia, the County (225.1 per 100,000) still fares better than the State (295.5 per 100,000).

Locally, the rates of gonorrhea are greatest among young adults between the ages of 15-19 (271.2 per 100,000) and 20-24 (347.2 per 100,000). There are also infections among those younger than 15,with approximately 15 cases of gonorrhea per year.

Primary and secondary (P&S) syphilis is most common among older groups (25-44 years) in Contra Costa. Over the last four years there have been a range of between 8 and 18 early syphilis cases per year. The overwhelming majority of syphilis cases in recent years in Contra Costa have been among men who have sex with other men.

Table 65. Rates of Chlamydia, Gonorrhea and Syphilis by Age. Contra Costa, 2000-2002

	Chlamydia	Gonorrhea	Syphilis (P&S)
0 - 9	3.4	1.2	--
10 - 14	62.3	18.1	--
15 - 19	*1,195.1	*271.2	.5
20 - 24	*1,355.2	*347.2	.6
25 - 29	538.9	166.4	1.8
30 - 34	197.1	69.8	1.9
35 - 44	61.2	42.4	1.8
45 +	9.3	8.4	.6
Total	**225.1**	**64.9**	**.8**

[*] 15-19 and 20-24 year olds had statistically higher rates of both chlamydia and gonorrhea compared to all other age groups. Note: 43 individuals were not included because their ages were unknown.

African American and Latinos have greater rates of chlamydia

The highest rates of chlamydia are among African American women (571.7 per 100,000), then African American men (230.0 per 100,000), followed by Latina women (115.3 per 100,000) and Latino men (32.0 per 100,000). Females (335.8 per 100,000) are affected by chlamydia at greater rates than males (106.0 per 100,000). It is important to note that women are more likely to be screened as part of general reproductive health care like pap smears or pregnancy tests. [State of California, STD Report, 2001]).

Gonorrhea affects African American women (192.9 per 100,000) and men (174.0 per 100,000) at much greater rates than other racial/ethnic groups.

Syphilis (P&S) rates are highest among White men (2.1 per 100,000), followed by African American men (1.6 per 100,000) and Latino men (1.4 per 100,000). There is a higher rate among males (1.6 per 100,000) compared to females (0.1 per 100,000).

Sexually Transmitted Diseases include chlamydia, gonorrhea and syphilis. (Also see AIDS section). These diseases are reported to the local health department when diagnosed by a doctor. It's important to note that Race and Ethnicity are reported in only one-third of the cases.

Sexually Transmitted Diseases are common infections

More than 15 million people in the United States become infected with one or more STDs every year.

STD is the term used to describe more than 25 infections which can pass from one person to another during sexual contact. The United States has the highest STD rate in the industrialized world - roughly half of all Americans become infected with an STD before the age of 35.

Despite the prevalence of STDs, studies show that **many people are unaware of their risks for contracting an STD or the serious, and sometimes deadly, health consequences** that may result from an untreated infection.

Table 66. Rates of Sexually Transmitted Diseases by Race and Gender. Contra Costa 2000-2002

	Chlamydia		Gonorrhea		P&S Syphilis	
	Female	Male	Female	Male	Female	Male
African American	571.7*	230.0*	192.9*	174.0*	0.7	1.6
Hispanic/Latino	115.3*	32.0*	7.5	8.2	--	1.4
Asian/PI	60.4	19.9	4.9	9.6	--	--
White	52.3	13.5	8.0	8.2	--	2.1
County wide	335.8	106.0	72.3	56.6	0.1	1.6

[*] Indicates that the rates of racial/ethnic and gender groups specified are statistically important using comparisons described in the text above.

Some STDs, **such as gonorrhea or chlamydia, may cause no symptoms**. People who do not know they are infected risk infecting their sexual partners and, in some cases, their unborn children. If left untreated, these diseases could cause debilitating pain or may destroy a woman's ability to have children. Some STDs can be cured with a single dose of antibiotics, but some, such as acquired immunodeficiency syndrome (AIDS), herpes or hepatitis, are incurable. People with these diseases remain infectious to others for their entire lives.

Those most at risk for contracting STDs are people who have unprotected sex. This includes people who have sex without using a latex condom. Having multiple partners may also increase someone's risk of getting an STD.

Chlamydia is the most reported communicable disease in California

Chlamydia accounted for the majority of reported STD cases in the state. Increases in the number of cases are due in part to expanded screenings and better testing methods.

Men who have sex with men (MSM) are also at greater risk

In California between 1997 and 2001, men who have sex with men (MSM) comprised an increasing proportion of chlamydia cases. It is unclear if this was due to greater infection or due to the fact that these men could be making better use of available screening programs such as HIV testing.

People are often infected with BOTH gonorrhea and chlamydia

The State of California STD Report for 2001 reports that the proportion of gonorrhea cases that were co-infected with chlamydia remained relatively high (greater than 30%), indicating a need to consider treating both diseases at one time.

According to recent State reports, syphilis (P&S) has been on the rise - primarily due to outbreaks among men who have sex with men (MSM) throughout all regions of California.

How to calculate the rate of Sexually Transmitted Infections (STDs)

A rate controls for differences in population size and is a good summary statistic for comparing health problems, like STDs, across populations of different sizes.

The rate is calculated by dividing the number of individuals diagnosed with a particular infection that occur within a specific race/ethnic group or county/State population, by the total number of individuals in that population, multiplied by 100,000.

Multi-racial individuals or those recorded as "other" were not included in this analysis due to their small numbers of cases.

Confidence intervals are available
You may download and view all detailed tables with 95% confidence intervals, at… http://cchealth.org/health_data/hospital_council/

Data sources

In the analysis above, local data about the number of STD cases is from Contra Costa Health Services' Epidemiology, Surveillance and Health Data unit.

For more information about STDin Contra Costa, contact Juan Reardon, MD, MPH, Director, Epidemiology, Surveillance and Health Data Unit, jreardon@hsd.co.contra-costa.ca.us or staff Martin Lynch by phone at (925) 313-6323. You can also visit the unit's page at http://www.cchealth.org/health_data.

Information about the number of cases at the State level is from the California Department of Health Services, STD Control Branch. Additional reference information is from the report, "STD - Sexually Transmitted Disease in California, 2001," DHS and tables from DHS, STD section. Denominator data was derived from Department of Finance estimates.

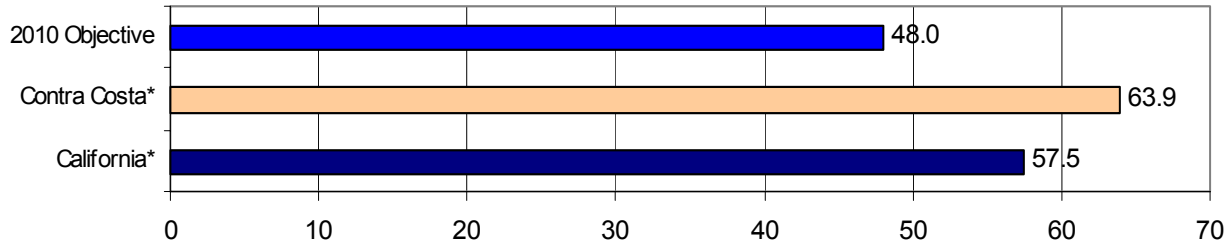
Statistics prepared by Contra Costa Health Services' Community Health Assessment, Planning & Evaluation Group: 7/04. Any analyses, interpretations or conclusions of the data, unless specified, have been reached by the author and are not from the CA Department of Health Services, Center for Health Statistics.

For more information about content in this report, please email Contra Costa Health Services' Community Health Assessment, Planning and Evaluation (CHAPE) group at chape@hsd.co.contra-costa.ca.us or phone (925) 313-6171.

Stroke

Contra Costa has not met the Healthy People 2010 objective of reducing the age-adjusted death rate from stroke to no more than 48.0 deaths per 100,000 residents.

Figure 19. Age-adjusted death rates from stroke per 100,000



[*] Indicates that the age-adjusted death rates for Contra Costa and California are significantly higher than the 2010 Objective. Contra Costa and California statistics were calculated for the three-year period 2000-2002.

Stroke is the third leading cause of death

In Contra Costa, strokes account for 9% of all deaths. Over a three-year period 2000-2002, there were 1,810 Contra Costa residents who died of stroke. This means that approximately 600 Contra Costa residents die from stroke each year.

The age-adjusted death rate from stroke is higher in Contra Costa (63.9 per 100,000) than in California (57.5 per 100,000).

People living in San Pablo, Oakley, Pittsburg and Richmond, as well as African Americans, are more likely to die from stroke compared to the county overall. These differences are not due to the age of the population and are likely due to environmental risk or unhealthy behaviors.

Some communities have higher death rates from stroke

Residents of San Pablo, Oakley, Pittsburg and Richmond are more likely to die from stroke compared to Contra Costa as a whole. It may be that the local numbers are too small to detect statistically significant differences in smaller communities such as Bay Point. For more information, please see table 65, page 140.

Table 67. Stroke deaths in selected communities. Contra Costa, 2000-2002

	Rate	Percent	(Number)
San Pablo	*109.1	4%	(77)
Oakley	*106.7	2%	(34)
Bay Point	93.6	2%	(30)
Pittsburg	*93.1	6%	(113)
Richmond	*83.9	11%	(202)
Antioch	77.4	7%	(133)
Brentwood	75.5	2%	(38)
Pinole	75.1	3%	(46)
Martinez	74.6	4%	(65)
Concord	62.8	11%	(198)
Walnut Creek	61.9	18%	(330)
Contra Costa	**63.9**	**100%**	**(1,810)**

[*] Indicates that the age-adjusted death rate (per 100,000) is significantly higher for people living in these communities compared to Contra Costa as a whole.

A large number of the deaths from stroke occur among people living in Walnut Creek (330, 18%), followed by people living in **Richmond** (202, 11%), **Concord** (198, 11%), Antioch (133, 7%) and Pittsburg (113, 6%).

Too many African American residents die of strokes

There are differences in stroke deaths by race/ethnicity. **African Americans are more likely to die from stroke**, and Asians, Latinos, and Whites are equally likely to die from stroke, compared to Contra Costa as a whole.

Table 68. Stroke deaths by race/ethnicity. Contra Costa, 2000-2002

	Rate	Percent	(Number)
African American	*104.4	11%	(191)
Asian	63.6	8%	(140)
Latino	62.1	6%	(116)
White	60.6	75%	(1,352)
Contra Costa	**63.9**	**100%**	**[1](1,810)**

[*] Indicates that the age-adjusted death rate (per 100,000) is significantly higher among African Americans compared to Contra Costa as a whole.

[1] The Contra Costa total also includes the 11 deaths that occurred among people from other race/ethnic groups such as Native American and Alaska Natives, Native Hawaiians and Pacific Islanders, and people from two or more race groups. Due to small numbers (<20 deaths), rates could not be calculated for these groups.

The majority of deaths from stroke occur among Whites (1,352, 75%), **followed by African Americans** (191, 11%), Asians (140, 8%), and Latinos (116, 6%).

No difference in men's and women's stroke rates

The age-adjusted death rate from stroke is similar among men (68.6 per 100,000), women (60.4 per 100,000), and Contra Costa overall (63.9 per 100,000). Over half of the deaths from stroke occur among women (60%, 1,078.)

Table 69. Stroke deaths by gender. Contra Costa, 2000-2002

	Rate	Percent	(Nnumber)
Men	68.6	40%	(732)
Women	60.4	60%	(1,078)
Contra Costa:	**63.9**	**100%**	**(1,810)**

Stroke death rates are steadily improving

Although the age-adjusted stroke rates have declined throughout the United States, **strokes remain a leading cause of serious, long-term disability**.

A stroke occurs when the blood supply to the brain is cut off (an ischemic stroke) or when a blood vessel bursts (a hemorrhagic stroke). Most strokes are of the ischemic type. Without oxygen, brain cells begin to die. Death or permanent disability can result. Nationally, strokes account for disability of more than one million Americans.

Strokes occur at any age but are **much more common in the elderly**, with the death rate doubling every ten years between the ages of 55 and 85. High blood pressure, smoking and having had a previous stroke or heart attack increase a person's chances of having a stroke. **With timely treatment, the risk of death and disability from stroke can be lowered**. It is very important for people to recognize the symptoms of a stroke and have quick access to medical attention.

Using this data to improve community health

In order to reduce health disparities, it is important to target the groups with the highest age-adjusted death rates from a given cause. For stroke, these are people living in San Pablo, Oakley, Bay Point, Pittsburg and Richmond, and African Americans.

In order to reduce the overall number of deaths in the county, without regard to health disparities, it may be better to target interventions to the group that accounts for the highest percent of deaths from a given cause. For stroke, these are Whites, African Americans, and people living in Walnut Creek, Richmond and Concord.

Because a person's risk for developing or dying from a chronic disease like stroke is cumulative, it is important to target ongoing environmental and behavioral interventions to the young and middle-aged, in addition to older populations. Examples could include strategies to limit youth access to cigarettes, increase community access to fruits and vegetables, teach people how to better manage stress in their lives, or how to recognize the signs and symptoms of a stroke.

Access to quick medical treatment is key to surviving a stroke and reducing any lasting disability. Lack of health insurance, transportation, or sufficient English skills stand in the way of many Contra Costa residents receiving needed stroke prevention services and medical treatment. Providing culturally competent and accessible heath care to all residents will be key to lowering the county's stroke death and disability rates.

Why are age-adjusted rates important?

An age-adjusted rate controls for differences in age and population size. An age-adjusted rate is the best summary statistic for comparing the impact of chronic diseases like stroke that are heavily influenced by age.

For example, the White population is older, and the Latino population is younger than the county as a whole. Without age-adjustment, we would expect to see higher death rates among Whites than among Latinos, and we would expect that these differences would be largely due to age. An age-adjusted rate calculates what the death rates would look like if the White and Latino populations had the same age distribution. The age-adjusted death rate is useful identifying differences that are due to poor access to health care or environmental and behavioral risk factors instead of age. (See the Methods section at the back of this report for more information about using rates.)
The differences highlighted above are statistically significant. This means that we are 95% certain that these differences are not due to chance.

How to calculate the percentage and number of deaths

Percentages describe the proportion of countywide deaths from stroke that occur within a particular community, race/ethnic group or gender. The percent is calculated by dividing the number of deaths that occur within a specific community, race/ethnic group or gender by the total number of deaths countywide and multiplying that number by 100.

Numbers show the actual number of deaths from each cause over a three-year period. The number of deaths per year can be calculated by dividing the total number of deaths from 2000-2002, as shown in the tables, by three.

Confidence intervals are available
You may download and view all detailed tables with 95% confidence intervals, at…
http://cchealth.org/health_data/hospital_council/

Data sources

Mortality data from the California Department of Health Services (CDHS), http://www.dhs.ca.gov/, Center for Health Statistics' Death Statistical Master File, 2000-2002. Any analyses, interpretations, or conclusions of the data have been reached by CHAPE and are not from the CDHS.

Population data from the California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050, and E-4 Population Estimates for Cities, Counties, and the State, 2001-2004, with DRU Benchmark, available online at: http://www.dof.ca.gov/HTML/DEMOGRAP/Druhpar.htm. Sacramento, California, May 2004.

Note: City-level denominators were extrapolated from the E-4 file to approximate the mid-year city-level population estimates that are needed to calculate city-level rates. For more information, please see our section on statistical methods.

ICD10 coding for cerebrovascular disease (ICD I60-I69) from the Centers for Disease Control and Prevention National Center for Health Statistics, available online at: http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_16.pdf.

Healthy People 2010 objectives from the US Department of Health and Human Services' Office of Disease Prevention and Health Promotion, available online at http://www.healthypeople.gov/.

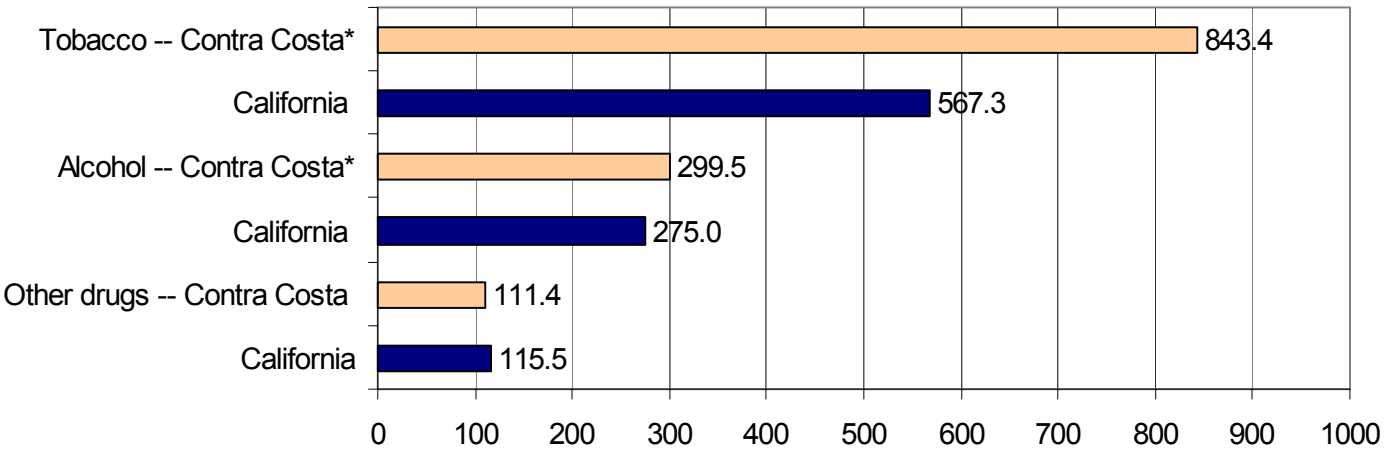
National trends and background from the Centers for Disease Control and Prevention National Center for Health Statistics, available online at: http://www.cdc.gov/cvh/library/fs_strokesigns.htm

Substance Abuse – Hospitalizations

Every year thousands of in-patient treatments for tobacco, alcohol and other drugs are provided to residents of Contra Costa.

People in living in Contra Costa are more likely than people living in California to receive hospital treatment for tobacco and alcohol abuse. People in Contra Costa are less likely than people living in California to receive hospital treatment for abuse of other drugs including marijuana, cocaine and heroin.

Figure 20. Crude rate of hospital treatments for substance abuse 2000 - 2002



[*] Indicates that the crude rates per 100,000 of hospital treatment for tobacco and alcohol abuse are significantly higher in Contra Costa. The crude death rates of hospital treatment for other drug abuse are similar in Contra Costa and California.

Over a three-year period 2000-2002, there were 22,640 hospital treatments for tobacco abuse, 8,749 hospital treatments for alcohol abuse, and 3,254 treatments for other drug abuse among Contra Costa residents. (Please see note on interpreting this data later in this section.)

This means that each year Contra Costa residents receive approximately **7,545 hospital treatments for tobacco abuse, 2,915 hospital treatments for alcohol abuse and 1,085 hospital treatments for other drug abuse.**

Some race/ethnic groups are more likely to receive hospital treatments for substance abuse.

African Americans and Whites are more likely to receive hospital treatment for tobacco and alcohol abuse compared to Contra Costa as a whole. African Americans are also more likely to receive hospital treatment for other types of drug abuse.

Table 68. Crude rate of hospital treatments for substance abuse by race/ethnicity, Contra Costa, 2000-2002

	Tobacco	Alcohol	Other drugs
African American	*1,488.8	*494.9	*309.5
White	*1,033.2	*358.2	116.5
Contra Costa	843.4	299.5	111.4
Hispanic/Latino	321.9	173.3	54.4
Asian/Other Pacific Islander	185.1	43.4	13.0
American Indian/ Alaska Native	147.6	--	--

[*] Indicates that the crude rate per 100,000 of hospital treatments for tobacco, alcohol or other drug abuse is significantly higher for these groups compared to the county as a whole.

The majority of the hospital treatments for tobacco, alcohol and other drug abuse occurred among Whites (17,119 for tobacco, 5,935 for alcohol and 1,931 for other drugs), **followed by African Americans** (4,296, 1,428, and 893), Hispanic/Latinos (1,768, 952, and 299), Asian/Other Pacific Islanders (726, 170, and 51) and American Indian/Alaska Natives (51, 16, and 9). In a number of cases (680 for tobacco, 248 for alcohol and 71 for other drugs), the race/ethnicity was classified as other/unknown.

Some communities have higher rates of substance abuse treatment

People living in Martinez, Richmond and San Pablo, and Pittsburg and Bay Point are more likely to receive hospital treatment for tobacco, alcohol and other drug abuse compared to the Contra Costa as a whole. People living in Concord are more likely to receive hospital treatment for tobacco and alcohol abuse. People living in Antioch and Oakley are more likely to receive hospital treatment for tobacco abuse, and people living in Walnut Creek are more likely to receive hospital treatment for alcohol abuse compared to the county as a whole.

Table 69. Hospital treatment rates for substance abuse by selected communities[1]. Contra Costa, 2000-2002

	Tobacco	Alcohol	Other drugs
Martinez	*1,690.4	*632.9	*192.7
Richmond & San Pablo	*1,335.8	*476.4	*261.2
Pittsburg & Bay Point	*1,188.0	*374.5	*171.2
Antioch	*1,033.6	259.0	105.1
Concord	*984.2	*348.8	107.9
Oakley	*958.8	251.8	74.2
Contra Costa	843.4	299.5	111.4
Pinole	758.0	267.0	82.7
Brentwood	708.1	252.3	79.2
Walnut Creek	670.2	*374.7	77.7

[*] Indicates that the crude rate per 100,000 of hospital treatments for tobacco, alcohol or other drug abuse is significantly higher for these communities compared to the county as a whole.
1 Due to shared zip codes, the communities of Pittsburg and Bay Point, and Richmond and San Pablo, have been combined for this analysis.

People living in Richmond and San Pablo have the highest number of hospital treatments for tobacco abuse (5,257), **followed by people living in Concord** (3,657), **Antioch** (2,941),

Pittsburg and Bay Point (2,893), Martinez (1,851), Walnut Creek (1,320), Oakley (750), Brentwood (581) and Pinole (440).

People living in Richmond and San Pablo have the highest number of hospital treatments for alcohol abuse (1,875), followed by people living in Concord (1,296), Pittsburg and Bay Point (912), Walnut Creek (738), Antioch (737), Martinez (693), Brentwood (207), Oakley (197) and Pinole (155).

People living in Richmond and San Pablo also have the highest number of hospital treatments for other drug abuse (1,028), followed by people living in Pittsburg and Bay Point (417), Concord (401), Antioch (299), Martinez (211), Walnut Creek (153), Brentwood (65), Oakley (58) and Pinole (48).

Using this data to improve community health

For the purposes of improving community health, hospitalization data is particularly hard to interpret because it reflects only the hospitalized (and often extreme) cases of substance abuse, does not take into account an individual's ability to access care and does not provide a count of unique individuals. For these reasons, **hospitalization for substance abuse treatment is not a good indicator of prevalence (rate of cases in a population) of substance abuse.** Hospitalization data can however provide information about how hospital services are distributed in a population by place and race/ethnicity and do allow us to track that distribution over time.

Interventions to address substance abuse could include improving access for non-English speaking clients, providing more low-cost community substance treatment and support services and messages from doctors and health service providers about the importance of reducing use and quitting.

Why are crude rates important?

A crude rate controls for differences in population size, and is a good summary statistic for comparing hospital treatments for substance abuse across groups of different sizes.

For example, we expect to see many more hospital treatments for substance abuse in California than in Contra Costa, and this is because the population of California is so much larger than the population of Contra Costa County. Rates allow us to see if Contra Costa County has proportionally more (or less) of its "fair share" of treatment for substance abuse. (See the Methods section at the back of this report for more information about using rates.)

In Contra Costa, there are many more Whites than African Americans, Latinos or Asians, and more people living in Richmond and San Pablo or Concord than in smaller communities such as Brentwood or Oakley. The differences highlighted above are statistically significant. This means that we are 95% certain that these are true differences and not due to chance.

Interpreting this data

The above statistics present the number and rate of in-patient hospital treatments for tobacco, alcohol and other drug abuse per 100,000 residents.

The statistics apply only to in-patient hospital diagnosis of treatment for tobacco, alcohol or other drug abuse and do not include treatment that takes place in a doctor's office, health clinic or emergency room. The statistics include any in-patient hospital diagnosis of treatment for tobacco, alcohol or other drug abuse, regardless of whether substance abuse was that person's primary reason for being hospitalized. A single person can be counted multiple times for multiple in-patient diagnoses of treatment for tobacco, alcohol or other drug abuse at one visit, or over multiple hospital visits over time.

The statistics indicate that some groups and communities are more likely to receive hospital treatment for tobacco, alcohol and other drug abuse compared to the county as a whole. **They do not tell us whether the increased risk of hospital treatment is due to a large rate of people successfully obtaining treatment for tobacco, alcohol or other drug abuse, or to a disproportional need for substance abuse treatment in that group or community.**

It is difficult to know whether a person may be more or less likely to seek hospital treatment if they have health insurance. A person without health insurance may avoid seeking hospital treatment if they do not have insurance or money to cover their care. On the other hand, a person without health insurance may be more likely to be hospitalized if they delay or forego preventive care.

Zip code boundaries

We selected the zip codes that "best fit" each of the communities listed above. For this analysis, the zip codes are as follows: Antioch (94509 and 94531), Brentwood (94513), Concord (94518, 94519, 94520 and 94521), Martinez (94553), Oakley (94561), Pinole (94564), Pittsburg and Bay Point (94565), Richmond and San Pablo (94801, 94803, 94804, 94805 and 94806) and Walnut Creek (94595, 94596, 94598). Due to shared zip codes, the communities of Pittsburg and Bay Point, and Richmond and San Pablo, were combined.

Confidence intervals are available

You may download and view all detailed tables with 95% confidence intervals at http://cchealth.org/health_data/hospital_council/

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http://cchealth.org/health_data/hospital_council/

Data sources

Hospitalization data from the California Office of Statewide Health Planning and Development, http://www.oshpd.ca.gov/, Healthcare Quality and Analysis Division, Healthcare Information Resource Center.

Population data from the California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050, and E-4 Population Estimates for Cities, Counties, and the State, 2001-2004, with DRU Benchmark, available online at: http://www.dof.ca.gov/HTML/DEMOGRAP/Druhpar.htm. Sacramento, California, May 2004.
Note: City-level denominators were extrapolated from the E-4 file to approximate the mid-year city-level population estimates that are needed to calculate city-level rates. For more information, please see our section on statistical methods.

ICD9 coding for tobacco abuse (305.1), alcohol abuse (291.81, 303.00, 303.91, 305.01, 305.02, 305.03, 305.00), and other drug abuse (292.11, 304.01, 304.11, 304.21, 304.31, 304.41, 304.90, 305.22, 305.52, 305.62, 305.90, 305.92) from the American Academy of Family Physicians Website, ICD-9 Codes for Family Practice 2000-2001: The FPM Long List, available online @ http://www.aafp.org/fpm/20000900/icd9_long.html.

Where to Find More Data

Where to Find More Data

Local Health Indicators Reports: Ready-made for Contra Costa County.

NEW! Visit http://www.cchealth.org/health_data/

for recent data tables produced by Contra Costa Health Services' Community Health Assessment, Planning, and Evaluation (CHAPE) Group and Epidemiology, Surveillance & Health Data (ESHD) Unit. Countywide and neighborhood level data are provided describing local communicable diseases, chronic diseases, injuries, and maternal and child health topics.

The California Department of Health Services' County Health Status Report presents yearly public health data that can be directly compared with national benchmarks. The website can be found online at http://www.dhs.ca.gov/hisp/chs/phweek/cprofile2004/Profile2004.pdf .

Northern California Council for the Community's map of The 52 Most Impoverished Neighborhoods in the Bay Area was created in 1996, and includes neighborhoods in Richmond, North Richmond, Crockett, San Pablo, Concord, Antioch, Bay Point, and Pittsburg. The map and accompanying data profiles have recently been updated to show changes that have occurred between the 1990 and 2000 census. You may download the color map and supporting data files, at no cost, by visiting http://www.ncccsf.org/DataCentral/home_dc.htm .

Demographic Data:

Information about people and places in Contra Costa County.

California Department of Finance provides current age, sex, and race data for California counties online at http://www.dof.ca.gov/html/Demograp/DRU_datafiles/DRU_datafiles.htm .The site provides official population projections for all of Contra Costa's cities and unincorporated areas for the years 2000 to 2050 (http://www.dof.ca.gov/HTML/DEMOGRAP/repndat.htm).

Visit the U.S. Census American Fact Finder website for year 2000 population, housing, economic, and geographic data. (http://factfinder.census.gov)

Other Health Topics

Local Births & Deaths:

The California Department of Health Services' website provides many downloadable data files, including birth and death data by zip code. (http://www.dhs.ca.gov/hisp/chs/OHIR/Publication/publicationindex.htm) The website also features an interactive query system - producing customized data tables and statistical reports for individual counties or California as a whole. (http://www.applications.dhs.ca.gov/vsq/)

Injuries:

The EPICenter, found at http://www.applications.dhs.ca.gov/epicdata/default.htm, allows users to calculate local fatal and nonfatal injury totals and rates by providing current California injury data online.

Risky Behavior & Health:

The Centers for Disease Control's Behavioral Risk Factor Survey (BRFSS) is the primary source of information on health-related behaviors of Americans. Data is collected state-by-state through telephone interviews. Questions are related to chronic diseases, injuries, and infectious diseases. The website can be found at http://www.cdc.gov/brfss/about.htm.

NEW! The 2001 California Health Interview Survey (CHIS)

contains data on public health topics including information on health insurance coverage and access to care. The survey sample was designed so that results could be generated for most California counties. Survey results and downloadable data files are available from http://www.chis.ucla.edu/.

Schools, Children & Learning:

The Department of Education's Data Quest website contains data at the individual school level, and includes information on test scores, English Learners, and eligibility for free or reduced breakfast/lunch programs. The website can be found at http://data1.cde.ca.gov/dataquest/dataquest.asp.

Help with Online Literature Reviews

Are you looking for published articles on a specific health topic or special population? PubMed is a service of the National Library of Medicine, provides online access to over 11 million MEDLINE journal citations dating back to the mid-1960's. PubMed includes links to many sites providing full text articles and other related resources at http://www.ncbi.nlm.nih.gov/PubMed/.

Statistical Methods

Why Do We Use Rates?

A rate provides a meaningful way to compare deaths between population groups of different sizes.

How to calculate a rate

A death rate is calculated by dividing the number of deaths by the total population, and then multiplying the result by a standard population size such as 100,000.

$$\text{Rate} = \frac{\text{Number of Deaths} \times 100{,}000}{\text{Total Population}}$$

How to make comparisons

A higher death rate for a population means that people in that group have an increased risk of dying from a particular disease.

A lower death rate for a population means that people in that group have a lower risk of dying from a particular disease.

A local example:

If we want to compare unintentional injury deaths between Contra Costa and California, it is important that we use rates.
California's population is much larger than that of Contra Costa - we would expect California to have many more unintentional injury deaths. Rates allow us to see if Contra Costa County has proportionally more (or less) of its "fair share" of unintentional injury deaths.

Table 70. Calculating rates: Contra Costa & California Unintentional Injury deaths (2000-2002)

	3 Years of Unintentional Injury Deaths	Population (2000-2002)
Contra Costa	666	2,921,403
California	27,970	104,111,745

To calculate death rates, we divide the number of deaths in each group by its total population, and then multiply the results by 100,000.

(NOTE: Multiplying our rate by 100,000 does not really change its size. This is simply a statistical tradition, which allows our local rates to be compared to other rates around the world.)

These calculations gives us a rate of 22.8 unintentional injury deaths per 100,000 in Contra Costa and 26.9 unintentional injury deaths per 100,000 in California.
This means that the unintentional injury death rate is higher in California - people living in California have a higher risk of dying from unintentional injury than residents of Contra Costa.

Why are Age-adjusted Rates Important?

Age-adjusted rates allow you to compare health statistics (like death rates) between population groups, even though the size of the groups or the age of group members might be very different.

An age-adjusted rate is the best summary statistic for comparing the impact of diseases like heart disease, cancer, stroke and diabetes that are heavily influenced by age.

Age-adjusted rates are useful for identifying differences that are due to environmental or behavioral risk factors instead of age.

How to calculate an age-adjusted rate

Step 1:
Break up the population into age groups and then track down the number of cases and the corresponding population total for each age group.

Step 2:
Calculate an age-specific rate for each age group.

An age-specific rate per 100,000 is calculated by dividing the number of cases by each group's total population and then multiplying that number by 100,000. For more information about how to calculate rates, please see page 155.

Step 3:
Choose a standard population and find the percentage of the standard population that is found in each age group. This report uses the 2000 US Census standard population to determine the percentage for each age group (shown below).
You can download US standard population files for 1940, 1950, 1960, 1970, 1980, 1990 and 2000 (at no cost) from the National Cancer Institute's website (found at http://seer.cancer.gov/stdpopulations/).

Step 4:
Calculate the weighted age-specific rate for each age group by multiplying each age-specific rate by the percent of the standard population that is found in that particular age group.

Step 5:
The sum of these weighted age-specific rates in a community or race/ethnic group is the age-adjusted rate for that particular community or race/ethnic group. See table below.

Example:

Heart disease deaths among all Contra Costa residents, 2000-2002

Age Group	Number of deaths (2000- 2002)	Population total (2000- 2002)	Age-specific rate*	2000 US Census (%) distribution United States	Weighted age-specific rate*
0-4	2	196,720	1.0	6.8%	0.1
5-9	2	219,369	0.9	7.3%	0.1
10-14	3	226,333	1.3	7.3%	0.1
15-19	3	203,912	1.5	7.2%	0.1
20-24	4	155,259	2.6	6.7%	0.2
25-29	10	166,444	6.0	6.9%	0.4
30-34	9	212,070	4.2	7.3%	0.3
35-39	31	246,185	12.6	8.1%	1.0
40-44	64	253,983	25.2	8.0%	2.0
45-49	120	232,038	51.7	7.1%	3.7
50-54	173	210,307	82.3	6.2%	5.1
55-59	230	157,862	145.7	4.8%	7.0
60-64	292	112,024	260.7	3.8%	9.9
65-69	304	86,837	350.1	3.4%	11.9
70-74	494	77,517	637.3	3.1%	19.8
75-79	785	70,758	1109.4	2.6%	28.8
80-84	974	49,865	1953.3	1.8%	35.2
>85	2123	43,920	4833.8	1.5%	72.5
Total:	5623	2,921,403		99.9%	198.1

Age-Adjusted Rate (w/ 95% confidence interval): *198.1 (192.9 to 203.3)

* Per 100,000 persons.

What is Statistical Significance?

In statistics, "significant" does not mean important. It means "probably true."

Throughout this report, when we say that a difference between two rates or percentages is significant, we mean that we are at least 95% certain this difference is not due to chance alone.

What is a confidence interval?

The confidence interval (CI) shows the lowest and highest boundaries between which we would expect the true rate to fall. A rate is considered a better estimate when it is based on a large number of cases and the confidence interval is narrow. It is common practice to put a 95% confidence interval around a rate.

Important things to remember

Just because two rates appear different, it doesn't mean that the difference is worth talking about.

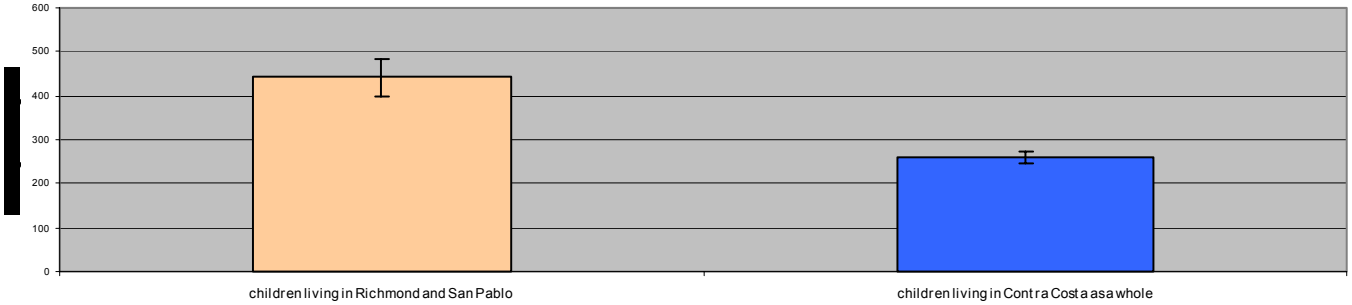
- A difference of 5 deaths per 100,000 may look impressive, but we do not expect this difference to be exactly the same every year. We expect small ups and downs.
- A statistically significant difference is a difference that is greater than would be expected through normal fluctuations.
- A difference is considered statistically significant when the confidence intervals for two rates do not overlap.

Local example:

When looking at our local data, it appears that the crude rate of hospital treatment for asthma is higher among children living in **Richmond** and **San Pablo** (441.6 per 100,000) than among children living in the county as a whole (259.8 per 100,000).

Comparing the confidence intervals
We compare the confidence intervals (Figure 21, page 160) to see if the upper and lower boundaries for children living in **Richmond** and **San Pablo** overlap with the boundaries for children living in Contra Costa as a whole.

Figure 21.



As shown in Fugure 21, the lower and upper boundaries of the 95% confidence interval are shown by "I-Bars." The "I-Bars" show that the lower boundary for children living in Richmond and San Pablo (399.6) is higher than the upper boundary for children living in Contra Costa as a whole (272.3).

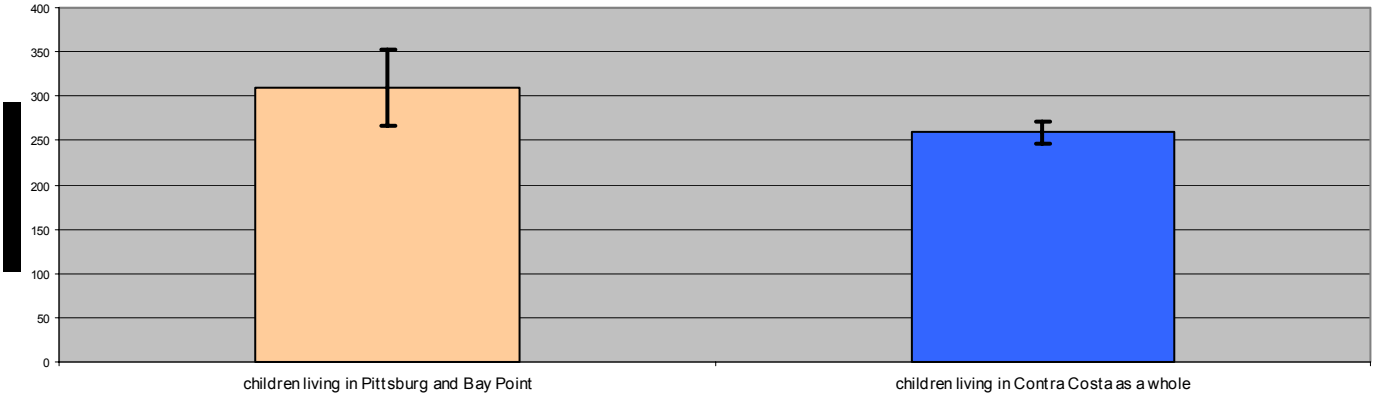
The confidence intervals do not overlap.

This is a statistically significant difference.

Therefore, we can say that the crude rate of hospital treatment for asthma is significantly higher among children living in Richmond and San Pablo compared to children living in Contra Costa as a whole

Another local example:

Figure 22.



It appears that the crude rate of hospital treatments for asthma is higher among children living in **Pittsburg** and **Bay Point** (310.2 per 100,000) than among children living in the county as a whole (259.8 per 100,000).

Comparing the confidence intervals

Again, we look at the confidence intervals to see if this is a statistically significant difference.

When looking at Figure 22, we notice that the lower boundary for children living in Pittsburg and Bay Point (267.3) is lower than the upper boundary for children living in the county as a wholde (272.3). The confidence intervals overlap. **This is NOT a statistically significant difference.**

How to Calculate Relative Risk (RR)

The relative risk (sometimes called "risk ratio") compares the likelihood of dying for a certain population group against the risk of death for all other population groups.

Calculating relative risk draws our attention to unfair racial differences in disease deaths and diagnosed cases.
Relative risk is calculated by dividing the death or disease risk in a specific population group (Group A) by the risk of people from all other groups.

$$RR = \frac{\text{Risk in One Group (Group A)}}{\text{Risk in All Other Groups}}$$

What relative risk tells us

A **relative risk that is greater than 1.0** shows that there is an increased risk among the people in Group A.

- This means if the relative risk was 1.5, people in Group A would be 50% more likely than people in all other groups to die from a cause.
- Or if the relative risk were 3.0, people in Group A would be three times as likely as people from other groups to die from a cause.

A **relative risk that is less than 1.0** indicates that there is a lower risk among the people in Group A.

- If the relative risk were 0.8, people in Group A would be 20% less likely than people in all other groups to die from a cause.

A local example:

Through tests of statistical significance, it was found that African Americans had the highest death rate from AIDS, compared to the Contra Costa County population as a whole.

For this example, African Americans will be our "Group A," the group with the highest death rate from AIDS. Our comparison group will be made up of people from all other race/ethnic groups.

Table 71. Calculating Risk.
Contra Costa County: AIDS Deaths1999-2001

	People who died from AIDS	Population
African Americans (Group A)	50	260,553
All Others	51	2,585,895
Total	101	2,846,448

To calculate the risk in each group, we divide the number of people who died of AIDS by the population totals in each group.

This gives us a risk of 0.0001919 among African Americans (50 divided by 260,553), and a risk of 0.0000198 among people from other race/ethnic groups (51 divided by 2,585,448).

To calculate the relative risk, we divide the risk among African Americans by the risk among people from other race/ethnic groups. This gives us a relative risk of 9.7 (0.0001919 divided by 0.0000198).

From this example, we can say that African Americans are ten times as likely to die from AIDS compared to people from other race/ethnic groups (RR=9.7).

Why Don't Our Rates Match the Others?

We have better population estimates

Rates in this report may differ from those in other reports because previously reported rates may have been calculated using older population estimates or data from another source.

We sought the most up-to-date population estimates for use in this report. In May 2004, the California Department of Finance (DOF) released a series of population estimates and projections for California cities and counties. These new population estimates document the population growth that has occurred since the 2000 US Census. These estimates are now considered the best data to use when calculating 2000-2002 health statistics for California communities.

The "multi-race" category is new

For the first time, the 2000 US Census allowed county residents to record themselves and their family members as belonging to "one or more races." The California DOF 2000-2002 population data also includes this new category for multi-race persons.

In most cases, the multi-race category is not included in the statistics or data tables. This is for a number of reasons that vary by dataset:

- Death dataset. There was a small number of deaths among multi-race persons leading to unstable rates.
- California Health interview survey. Residents choosing the multi-race option were lumped together with 'other' into a general and ill-defined category: 'other single/two or more race groups.'
- Birth (AVSS) dataset. Residents choosing more than one race group were left uncoded and lumped into a general and ill-defined category: 'other/not coded.'
- Hospitalization dataset. There was no multi-race reporting category for the 2000-2002 data.

Some residents who had previously been categorized into a single-race group are now categorized as multi-racial. This may especially affect the statistics for Asian/Pacific Islanders, American Indian/Alaska Natives and African Americans.

Hospitalization rates required extra work

Unlike the California DOF population data, the hospital information does not include the race/ethnic category of two or more race groups.

In order to calculate rates using the hospital data, we had to reallocate all multiracial residents found in the DOF population data. These multiracial residents were moved into the other single race groups.

This reallocation was done in accordance with the DOF guidelines that specify that 54% of multiracial residents in Contra Costa should be reallocated as Asian/Pacific Islander, 25% should be reallocated as American Indian/Alaska Native and 21% should be reallocated as African American. (More information about the DOF guidelines for Contra Costa and other California counties is available online at http://www.dof.ca.gov/HTML/DEMOGRAP/MultiraceAllctns2000-2050.htm.)

In this report, the reallocated population totals were used in calculating the rates of hospital treatments for asthma, mental disorders and substance abuse. (See table below.)

For all other health statistics, we used the unmodified race/ethnic population totals from the DOF. (See table ## below.)

Table 72. **Reallocated** mid-year estimates race/ethnicity groups Contra Costa 2000-2002 (3-year total)

	Population Size
White	1,656,936
Hispanic/Latino	549,215
Asian/Pacific Islander	392,148
African American	288,556
American Indian/Alaska Native	34,548
Total:	2,921,403

Table 73. California DOF mid-year estimates for race/ethnic groups and gender
Contra Costa for 2000-2002 (3-year total)

	Men	Women	Population Size
White	805,802	851,134	1,656,936
Hispanic/Latino	281,272	267,943	549,215
Asian	160,949	178,073	339,022
African American	126,981	145,184	272,165
American Indian/ Alaska Native	7,412	7,623	15,035
Native Hawaiian/ Other Pacific Islander	5,270	5,708	10,978
Two or more race groups	**38,480**	**39,572**	**78,052**
Total:	1,426,166	1,495,237	2,921,403

City-level population estimates

Unfortunately, the *California Department of Finance (DOF)* does not provide the mid-year population estimates for cities that are needed to calculate city-level rates.

Based on the DOF city-level population estimates for January 1st 2001 and January 1st 2002, we calculated a 2001 mid-year population estimate for residents in each city. The 2001 mid-year population estimates were then multiplied by three for calculating 2000-2002 rates.

Table 74. Calculated mid-year city-level estimates by gender
Contra Costa 2000-2002 (3-year total)

	Men	Women	Population Size
Antioch	139,336	145,214	284,550
Bay Point	33,577	33,393	66,970
Brentwood	40,448	41,602	82,050
Concord	183,518	188,052	371,569
Martinez	54,326	55,174	109,500
Oakley	39,520	38,705	78,225
Pinole	27,883	30,167	58,050
Pittsburg	86,728	89,822	176,550
Richmond	146,790	155,160	301,950
San Pablo	44,986	46,614	91,601
Walnut Creek	90,924	106,026	196,950
Total:	1,426,166	1,495,237	2,921,403

City-level estimates for men and women

The California DOF does not provide the mid-year population estimates for cities by gender that are needed to calculate city-level rates for men and women.

We assumed that the rate of population growth is the same among men and women, and calculated 2001 mid-year city-level population estimates for male and female residents. These calculations were based on statistics from the 2000 US census and the average rate of population growth in each city between 04/01/2000, the date of the 2000 US Census statistics, and 06/30/2001. The 2001 mid-year population estimates were then multiplied by three for calculating 2000-2002 rates.

City-level estimates by age group

The California DOF does not provide the mid-year population estimates for cities by age group that are needed to calculate age-specific and age-adjusted rates.

We assumed that the rate of population growth is the same in each age group, and calculated 2001 mid-year city-level population estimates for each age group in each city, for all residents, male residents and females residents. These calculations were based on statistics from the 2000 US Census and the average rate of population growth in each city between 04/01/2000, the date of the 2000 US Census statistics, to 06/30/2001. The 2001 mid-year population estimates were then multiplied by three for calculating 2000-2002 rates.

These city-level estimates, by age group and gender, were used for the age-adjusted rates and for the analyses on specific topics such as teen births and asthma hospitalizations among children. These additional denominators are shown in detailed tables with 95% confidence intervals, available online at: http://cchealth.org/health_data/hospital_council/.

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CONTRA COSTA
HEALTH SERVICES

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