1. Why is the rate high when the number is so low?
This may seem like a contradiction, but it's really not.

The number is an actual count, like the total number of recorded heart disease deaths.

The rate is a ratio; it is calculated with a formula. Rates are very important because they allow us to compare different populations.

For example, African Americans comprise only about 9% of Contra Costa County’s population, but African Americans have the highest rate of heart disease deaths — almost twice the rate of Whites. Rates help you see big problems in small population groups. Without using rates to compare population groups, we could not uncover these health disparities and unfair differences.
(Note: For more information on calculating rates, see the Introduction.)

2. Which is more important to look at — the rate or the number?
The answer to this question depends on your interests and priorities — rates and numbers tell different stories.

The total number of deaths, cases or hospitalizations tells you how common or widespread the problem is in the community. In order to lower the overall county death or hospitalization rates, it may be better to target interventions to the communities that account for the greatest number of cases or deaths.

If social justice and reducing health disparities are important to you, pay close attention to rates. Rates allow us to make better comparisons between groups. Although one population group may have a lower number of deaths or hospitalizations, they may have the highest rate compared to the county and all other race/ethnic groups. This means that they are disproportionately impacted by the given disease or injury. In order to reduce unfair health disparities, it is important to target groups with the highest age-adjusted rates. Groups that are disproportionately impacted by a given disease or injury may be so due to poor access to health care or environmental and/or behavioral risk factors.
For example, if you are choosing a site for a health-screening program, you will likely need to look at both rates and numbers. At times, you may be asked to choose between those communities that have the poorest health outcomes and the greatest need for care (rates), and those places in which you could possibly reach a greater number of people (numbers and totals).

3. Sometimes your tables show rates that are much higher than others, but in the text you say there is no difference. Why?
If two rates appear different in the tables – one is higher than another – it doesn’t mean that the difference is real or true. A rate difference of 10 deaths per 100,000 between groups may look impressive, but this difference may not be the same every year, and it may not be statistically significant based on the confidence intervals. If rates are not significantly different based on confidence intervals, we say in the text that there is no difference between the rates or that the rates are similar.

Throughout this report, when we state in the text that a rate is higher or lower than the county overall or than another race/ethnic group, we mean that it is significantly higher or lower. By “significant”, we mean that the difference between two rates is statistically significant based on 95% confidence intervals (see Glossary). If the confidence intervals for two rates do not overlap, we conclude with 95% certainty that the difference between the two rates is significant and not due to chance alone.

4. Can I compare these numbers and rates to those in earlier CHAPE reports?
No. A small difference between a rate in past reports and a rate in this report may or may not be significant and therefore cannot reliably show an increase or decrease of “events” over time.

The rates and numbers in this report represent a snapshot in time for the years 2002-2004 and are based on counts and population totals and estimations specific to this time period. The coding for disease, race/ethnic, and age group categories is also specific to this report. Thus, the methods for compiling this report are similar to those we used for past reports but not entirely identical. We advise that the numbers and rates in this report not be compared to those in past reports.
5. Why don’t your rates and totals match other reports I’ve read?
Small differences in coding and statistical methods can lead to slight differences in reported rates. For example, a rate for “adults” in one report may pertain to adults 18-64 years while another report may include in its “adults” category individuals 18 years and older. Similarly, some reports may include Pacific Islanders in the “Asian” category for example, while others may categorize Pacific Islanders as “Other”. Also, rates presented in one report may be crude versus age-adjusted in another.

Differences in what “counts” as an event or case will affect the totals and numerator for rate calculations. Using breast cancer as an example, one report may include all deaths due to breast cancer – both invasive and non-invasive – whereas another may include deaths due to non-invasive breast cancer only in its numerator. These different totals will translate into different rates.

In calculating rates we also use population estimates. The process by which other report writers calculate population totals may differ from what we used in this report. We used the Department of Finance (DOF) 2002-2004 overall county estimate for Contra Costa. We calculated 2003 mid-year estimates from the DOF 2000-2004 totals multiplied by 3.

6. Why is the data three years old? Are there newer numbers?
The process of data collection, cleaning, coding and analysis is a time-consuming process. We used the most up-to-date death, birth and hospitalization data available at the time of writing this report. In a few cases, more recent count data for a particular “event” was available, however the corresponding year’s population data was not, hindering our ability to calculate rates.

If you additional questions, CHAPE staff is available to discuss the analysis, tables and data sources found in this report. Contact Chuck McKetney at (925) 313-6171 or cmcketne@hsd.cccounty.us for assistance.