



## DATA AND STATISTICS

*Get the facts, or the facts will get you. And when you get them, get them right, or they will get you wrong.*

Dr. Thomas Fuller (1654 - 1734), *Gnomologia*, 1732

### The Picture in San Diego

The following are organizations that provide data specific to San Diego.

**Community Health Improvement Partners (CHIP)**  
707 Broadway, Suite 905  
San Diego, CA 92101  
(619) 515-2854  
[www.sdchip.org](http://www.sdchip.org)

**United Way of San Diego County Outcomes Research**  
4699 Murphy Canyon Road,  
San Diego, CA 92123.  
(858) 492-2000  
[www.unitedway-sd.org/outcomes.html](http://www.unitedway-sd.org/outcomes.html)

**ARJIS (Automated Regional Justice Information System)**  
[www.arjis.org](http://www.arjis.org)  
(619) 533-4205

**San Diego County Health and Human Services Agency**  
1700 Pacific Hwy  
Mail Stop P501A  
San Diego, California 92101  
[www.co.sandiego.ca.us/cnty/cntydepts/health](http://www.co.sandiego.ca.us/cnty/cntydepts/health)

**San Diego Police Department (SDPD)**  
1401 Broadway  
San Diego, California 92101-5729  
(619) 531-2000  
Phone directory:  
[www.sannet.gov/police/about/directory.shtm](http://www.sannet.gov/police/about/directory.shtm)



**County of San Diego Office of the District Attorney**  
Hall of Justice  
330 West Broadway  
San Diego, California 92101  
(619) 531-4040 phone  
(619) 237-1351 fax  
[www.co.sandiego.ca.us/cnty/cntydepts/safety/da](http://www.co.sandiego.ca.us/cnty/cntydepts/safety/da)

### Spotlight on a Local Organization

#### The San Diego Association of Governments

The San Diego Association of Governments (SANDAG) serves as the forum for decision-making on regional issues in San Diego.

SANDAG is governed by a board of directors composed of mayors, council members, and supervisors from each of the San Diego region's 19 local governments. As a technical and information resource for the region, SANDAG provides assistance in the areas of demographic and economic analysis, transportation studies, survey design and analysis, criminal justice

studies, public facility location and management analysis, housing needs analysis, environmental planning, and other types of studies.

SANDAG develops annual demographic estimates and long range forecasts in addition to maintaining census data files. SANDAG is the state-designated Regional Census Data Center for the region.

#### SANDAG and Criminal Justice

SANDAG's Criminal Justice Research Division (CJ Division) has conducted

comprehensive local, private, state, and federally sponsored research related to criminal justice and public health prevention and intervention strategies and programs. The CJ Division has an extensive history of conducting process and impact evaluations of collaboration between both public and private agencies.

The CJ Division also leverages the resources within SANDAG to enhance their research capabilities. This includes the GIS expertise of the Technical Services Division and (*continued*)



## Spotlight on a Local Organization

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access to regional crime data through ARJIS, a nationally recognized network system that contains data on the region's crime cases, arrests, citations, field interviews, and gang information.

For more information about SANDAG please visit the Web site at [www.sandag.org](http://www.sandag.org).

## Interpreting Data: What do the figures mean?

By Patricia Hodge

Data is an essential resource for the public health professional. It helps to identify needs or problems, gain program buy-in, develop collaborative efforts, generate policy and legislation, and enhance program components and accountability. The Internet serves as the most immediate source for data because of its considerable accessibility. There are almost an infinite number of user-friendly websites with national, state and local statistics on a variety of health-related topics.

In most cases, organizations pursuing funding gather valuable statistics to demonstrate and describe the issues or needs. Although data is readily available, being able to make interpretations regarding statistics can be complex. Below are some tips on interpreting basic statistics such as **ratios**, **proportions**, **percentages** and **rates**.

- **Ratios** are most often used to express the relationship between two groups by dividing one into the other. For example, when comparing the number of juvenile arrests to adult arrests in 2002, there were 1,379,049 juvenile arrests (numerator) and 7,126,299 adult arrests (denominator). Stated as a ratio it would read, *for every 100 adults arrested there were 19 juvenile arrests*.
- **Proportions** are a kind of ratio, but are used to describe a proportion of a total population. For instance, among the 1,379,049 juvenile arrests 401,830 were female. Thus a proportion would state, *females represent 0.29 of the total juvenile arrests in 2002*.
- A **percentage** is a proportion based upon 100. After multiplying 0.29 by 100, *29% of juvenile arrests in 2002 were female*. Percentages are commonly used and are simple to calculate. A tip when using percentages is to always include the total population ( $n = 1,379,049$  juvenile arrests) as a point of reference. Sometimes a large percentage may represent a small part of the population if the total population or sample is small.
- **Rates** are ratios that represent the probability of a certain event and are used when describing

prevalence. Rates are time bound and compare the occurrence of a certain event to the number of people at risk of the event. Crime is often given in the form of rates. *In 2002 the juvenile arrest rate in San Diego was 58 per 1,000 population*. Rates are comparable because they are adjusted to per 100, 1,000 or even 100,000. Rates are also valuable in showing data over time, thus describing trends. Compared to the previous rate, juvenile arrests in 2001 occurred at a *rate of 61 per 1,000 population*; therefore there was a decrease in the rate of juvenile arrests between the two years.

Statistics such as rates and percentages are simple and can provide details about a population. It is beneficial to become familiar with more in-depth statistical data especially when using such information to argue causal relationships. In many cases, information about research design and statistical limitations can add a greater perspective to data interpretation.

*Patricia Hodge is a Masters candidate in Public Health at San Diego State University and is currently employed as a public health program evaluator. She is also an intern with the Mid-City Community Advocacy Network's Partnership for the Public's Health. The PPH Initiative is working with residents to address policies related to public health issues in the Mid-City community of San Diego.*

## Web Resources

The following web sites provide data sources on violence and related issues whether through online databases or publications.

- National Crime Victimization Survey  
<http://www.icpsr.umich.edu/NACJD/NCVS>
- Youth Risk Behavior Surveillance System (YRBS)  
<http://www.cdc.gov/nccdphp/dash/yrbs/>
- National School Safety Center - School Safety Surveys & School Associated Violent Death Report <http://www.nssc1.org>
- Federal Bureau of Investigation Uniform Crime Report  
<http://www.fbi.gov/ucr/ucr.htm>
- World Health Organization, Department of Injuries and Violence Prevention  
[http://www.who.int/violence\\_injury\\_prevention/en/](http://www.who.int/violence_injury_prevention/en/)

*The UCSD Academic Center of Excellence on Youth Violence Prevention connects community assets with university resources to promote research and education on youth violence in San Diego*  
[www.sdhealth.org/YVP/YVP.html](http://www.sdhealth.org/YVP/YVP.html)