

2-1-2006

Statistical Evidence for the Health of a Nation

Jackie Shane

Follow this and additional works at: https://digitalrepository.unm.edu/ulls_fsp

Recommended Citation

Shane, Jackie. "Statistical Evidence for the Health of a Nation." *The Cyberskeptic's Guide to Internet Research* (2006).
https://digitalrepository.unm.edu/ulls_fsp/35

This Article is brought to you for free and open access by the Scholarly Communication - Departments at UNM Digital Repository. It has been accepted for inclusion in University Libraries & Learning Sciences Faculty and Staff Publications by an authorized administrator of UNM Digital Repository. For more information, please contact disc@unm.edu.

Author: Jackie Shane, University of New Mexico, jshane@unm.edu
Published in: The Cyberskeptic's Guide Internet Research
Column: Paint by Numbers, Jan 2006

How healthy are Americans? Statistical evidence for the health of a nation

Though discussions relating to health-care, illness, and mortality on the Internet are abundant, locating statistics poses special challenges. To cover this topic in one column is impossible, so I have chosen the most relevant agencies and organizations, focusing on sites that have successfully answered real-life reference questions. This column covers the types of numbers that might interest an epidemiologist. It explores sites that describe common American ailments, as well as those in the news. Next month's column will examine ways to locate information about health-care funding, and examine how funding for health-care programs can influence the health of a nation. A future column on locating geographic information will also include health-related topics.

Death and dying

Have you ever wondered how you might die?

If you believe in probability, the Centers for Disease Control and Prevention might just have your answer. This a wonderful site for locating data on just about anything related to health in the United States. Perhaps the best place to begin is *CDC Wonder* (no pun intended) at

<http://wonder.cdc.gov/>.

WONDER stands for Wide-ranging OnLine Data for Epidemiologic Research. This is essentially the CDC's data for dummies section. It provides complex data sets in a user-friendly format intended for both practitioners and the general public. Its purpose is to help public health officials make educated decisions and to help the public avoid injuries and illness through knowledge and awareness. What it means for the researcher is quick and easy data about health and safety. CDC presents customized data sets based on the user's query, created by simply pulling down menus. Numeric data can be exported as tab delimited for import into a statistical management program or database. The data itself is often hosted by sub-agencies of the CDC such as the National Institute of Occupational Safety and Health or the National Institutes of Health. The site is particularly useful for statistics relating to injury, environmental and occupational health and safety, chronic disease prevention, and communicable disease.

I had heard that the leading cause of death for young women in the U.S. was suicide and that men were much more likely to use firearms on themselves than were women, but the CDC data does not confirm this. First of all the number one killer of women between the age of 35-44 is cancer with suicide ranking fourth; firearms are a woman's first preference. Men in this age group are most likely to die of unintentional injury. To draw this conclusion, I queried "Leading Causes of Death," and selected female, between the ages of 15-65.

From obesity to diabetes, Americans can eat themselves sick like no other nation. The CDC tells us that about 60 million Americans are obese, <http://www.cdc.gov/nccdphp/dnpa/obesity/index.htm>

and the graph at <http://www.cdc.gov/nccdphp/sgr/ataglan.htm> shows the decline in physical activity of young adults by age and sex. The benefit of the CDC's pages is that it is not just *gripe by numbers*, but rather advice at every step on how to avoid *becoming* a number.

Also housed at the CDC is The National Health Care Survey, <http://www.cdc.gov/nchs/nhcs.htm> and various CDC publications such as Morbidity and Mortality Weekly Report (MMWR), which is best used with the advanced search engine provided by First.gov.

A common indicator of the health of a country is its infant mortality rate. According to the CIA World Fact Book, infant mortality in the United States is about .65 percent. Considerably lower than that of Afghanistan which ranks second highest at 163 deaths per thousand births. As a first-world country, however, the U.S. has a very high infant mortality rate, topping Cuba, South Korea, and Taiwan. <http://www.cia.gov/cia/publications/factbook/rankorder/2091rank.html>

For locating international health statistics it is imperative that you start with the World Health Organization, <http://www.who.int/en/> though perhaps due to the way WHO must integrate data from all over the world, its interface is slightly less intuitive. To locate data on infant mortality, for example, go to Health Topics and chose mortality, rather than infant. From there chose Child Mortality. <http://www.who.int/healthinfo/statistics/mortchildmortality/en/index.html> To search WHO periodical publications use WHOLIS, or the WHO Library Database. Of course the Index to International Statistics (IIS), or Statistical Universe indexes WHO publications as well, but this is by no means free.

Emerging illness

If obesity is not sensationalist enough as a choice of winter illness, consider then avian influenza. Cooler weather is, after all, when viruses come out to party, or at least wait for their hosts to go to a party. Though the first victims of a pandemic flu are left with little recourse, both the CDC website and Pandemicflu.gov are good places to start for an overview and associated numbers. Pandemicflu.gov, <http://pandemicflu.gov/> is sponsored by the U.S. Department of Health and Human Services. This site is primarily a way to inform people of the risks and provide strategies for prevention. The CDC's site is a better place for statistics however. <http://www.cdc.gov/flu/avian/index>.

When researching a health topic such as bird flu, consider using specific terminology. Beginning with avian influenza, subtype H5N1, and Zoonosis (which is any infectious

disease that may be transferred from animals to humans). To monitor the number of confirmed cases by country visit the WHO's site.

http://www.who.int/csr/disease/avian_influenza/country/cases_table_2005_11_29/en/index.html

No vaccine against the "bird flu" has yet been discovered, but a summary of clinical trials is available at the CDC. Furthermore, a detailed description including the population studied and completion date can be found at Clinicaltrials.gov

<http://www.clinicaltrials.gov/ct/show/NCT00240968?order=4>

Clinicaltrials.gov is hosted by the National Institute of Allergies and Infectious Disease (NIAID),

<http://www3.niaid.nih.gov/> which is actually a subdivision of the National Institutes of Health (NIH).