

# Welcome to the International Year of Statistics

2013 is the International Year of Statistics. More than 2,000 organizations—professional statistical societies, colleges and universities, primary and secondary schools, businesses, government entities, and research institutes—are participating in this worldwide event. Why? Because statistics have powerful and far-reaching effects on everyone.

Go to [www.statistics2013.org](http://www.statistics2013.org) to learn more.



## What Is Statistics?

When many people hear the word “statistics,” they think of either sports-related numbers or the college class they took and barely passed. While statistics can be thought about in these terms, there is more to the relationship between you and statistics than you probably imagine.

Several informal definitions are offered in the book *A Career in Statistics: Beyond the Numbers* by Gerald Hahn and Necip Doganaksoy:

- The science of learning from (or making sense out of) data
- The theory and methods of extracting information from observational data for solving real-world problems
- The science of uncertainty
- The quintessential interdisciplinary science
- The art of telling a story with [numerical] data

Statistics are produced around the world by governments, political parties, civil servants, financial companies, opinion-polling firms, campaign groups, social-research entities, scientific groups, news organizations, and so much more.

## How Does Statistics Affect You?

You may not be aware of it, but statistics affects nearly every aspect of your life, including:

- Foods you eat
- Weather forecasts
- Emergency preparedness
- Assessing disease risks
- Protecting your pet’s health
- Improving your health care
- Transportation systems you use
- Assessing your credit worthiness
- Pricing your insurance policies
- Ensuring national security
- Examining economic health
- Prosecuting criminals
- Ensuring the safety of medicine
- Rulemaking by governments
- Assessing teacher effectiveness
- Monitoring climate change

## Statistics—An Excellent Career Choice

Since our world is becoming more quantitative and data-focused, job opportunities in statistics are plentiful and projected to increase worldwide. Many industries depend on statisticians to analyze data, which helps in making critical decisions. Statisticians work on important and challenging problems such as:

- Estimating the safety of nuclear power plants and alternative energy sources
- Evaluating the impact of air, water, and soil pollution
- Estimating the unemployment rate of a country
- Analyzing consumer demand for products and services
- Designing studies for and analyzing data from agricultural experiments to increase crop productivity and yields

## Statistics Education Resources

Demand for statisticians and data analysts is expected to increase by 4.4 million jobs worldwide in the years ahead. To introduce students to careers in statistics and teach them basic statistics literacy, many statistical organizations have developed primary and secondary school statistics education programs and resources, most of which are free of charge. An excellent example is the Census at School program, an international classroom statistical literacy project. To access these resources, go to the Primary & Secondary School Teacher Resources section at [www.statistics2013.org](http://www.statistics2013.org).