

Career Opportunities in Statistics

ASA RESOURCES

Careers in Statistics Web Site
www.amstat.org/careers

Careers in Statistics PowerPoint Presentation
www.amstat.org/careers/presentation.cfm

Schools Offering Degrees in Statistics
www.amstat.org/education/sods

Center for Statistics Education
www.amstat.org/education

Biometrics Section
www.bio.ri.ccf.org/Biometrics

Biopharmaceutical Section
www.amstat.org/sections/SBIOP

Section on Statistics in Epidemiology
www.amstat.org/sections/epi/sie_home.htm

ASA JobWeb
jobs.amstat.org

Placement Service—ASA Annual Meetings
www.amstat.org/meetings



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OTHER RESOURCES

International Biometric Society
www.tibs.org

Society for Clinical Trials
www.sctweb.org

Occupational Outlook Handbook, Bureau of Labor Statistics
www.bls.gov/oco

Jobs for statisticians in the health and medical industries are numerous. Statisticians work in hospitals, research universities, pharmaceutical companies, the U.S. Food and Drug Administration, Centers for Disease Control and Prevention, and the National Institutes of Health. Students interested in health and medical statistics should study chemistry, biostatistics, biology, and other natural science courses, as well as statistics, mathematics, and writing.

FIELDS OF APPLICATION

BIOMEDICAL RESEARCH

Improved medical treatments and devices rely on careful experiments that compare promising new methods with current techniques. Biostatisticians work on clinical trials and other experiments to formulate scientific questions, determine appropriate sampling techniques, coordinate data collection procedures, and carry out statistical analyses.

ANIMAL HEALTH

Animal health statisticians work with people educated in areas such as chemistry, biology, veterinary science, computer science, and business to discover, develop, and market a compound with the overall goal of making animals healthier or food healthy, safe, and efficient to produce.

PHARMACOLOGY

Statisticians in pharmacology work in all aspects of drug discovery, development, approval, and marketing: pre-clinical research, clinical trials, epidemiology, health economics, market research, and publication in scientific journals.

HEALTH & MEDICINE

GENETICS

Statistics has been used in human genetics to create automated methods of labeling possible indicators of genetic abnormalities, such as birth defects and early aging. Genetics also has been used in breeding to produce desirable characteristics in offspring. Using complex statistical models, statisticians aid in formulating sound decisions by sorting out the environmental effects from the genetic.

CHEMISTRY

Statisticians in chemistry may design studies to determine variability in a compound or to test mixtures of ingredients. They also may use statistical techniques to discover and replicate compounds for use in medicine. Statisticians work in many areas of chemistry, including analytical, physical, organic, inorganic, biochemical, and formulation.

EPIDEMIOLOGY

Epidemiological statisticians work on projects such as calculating cancer incidence rates or the rates of chronic and infectious diseases; monitoring and reporting on disease outbreaks; and monitoring changes in health-related behaviors, such as smoking and physical activity. Fields of practice include pharmacoepidemiology and nutritional, environmental, genetic, and social epidemiology.