

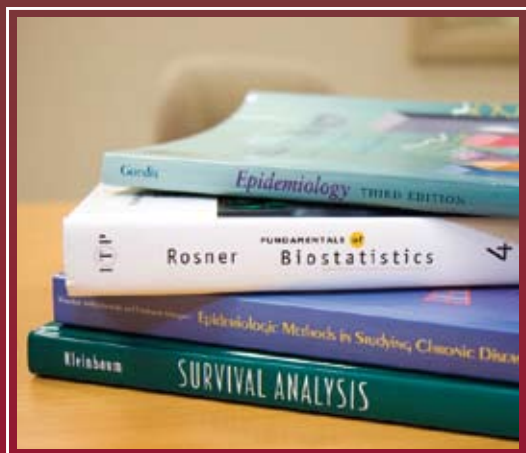
admission to the department of epidemiology and biostatistics

Epidemiologists are trained in the study of the distribution and determinants of disease or disability in human populations. Biostatisticians use statistical procedures to analyze various types of health-related information.

Career opportunities exist at local and state health departments, the Centers for Disease Control and Prevention, National Institutes of Health, pharmaceutical companies, insurance companies, HMOs, universities, and research organizations.

Epidemiologists may start an academic career or become preventive medicine officers, public health surveillance officers, or directors of disease registries. Biostatisticians may also have an academic career, or are often directors of vital statistics, statistical programmers, evaluation managers, or project data managers.

Degrees offered: MPH, MSPH, DrPH (BIOS only), Ph.D.



Epidemiology and Biostatistics represents the scientific core of public health. As measurement and research sciences, epidemiology and biostatistics serve as the basic tools for public health action. Both disciplines use statistical procedures to analyze various types of health-related information. Areas of involvement include:

- Investigating physical, mental, and social processes that affect health
- Developing statistical methodology and models for public health applications
- Developing and evaluating effective disease prevention and control measures

The department's instructional program has two major components, epidemiology and biostatistics. Epidemiology involves research into factors that influence the occurrence and course of human health problems. These health problems include infectious and chronic diseases, conditions affecting mental and emotional well-being, physical impairments, accidents, addictions, and suicides. Epidemiologists attempt to establish the causes of health problems by looking at the biological, environmental, social, and behavioral factors affecting health, illness, disability, and premature death. Identification of risk factors then shows the way to clinical and environmental trials in which epidemiologists experimentally assess the success of interventions.

Biostatisticians develop and apply statistical theory, methods, and techniques to the planning, implementation, and evaluation of research projects and health programs. Through these activities, they contribute to epidemiological, observational, and clinical research designs and analysis. They design and manage health data systems, develop methodology to model relationships between health outcomes and a variety of individual and environmental factors, and prepare inferential and probabilistic statements based on biological, social, and environmental data.

Admission Requirements

Specific information and links regarding admissions, including deadline dates, can be found at the Arnold School of Public Health webpage: <http://www.sph.sc.edu/futurestudents/index.htm>. Applicants must apply through the Schools of Public Health Application Service (SOPHAS). Please visit www.sophas.org for further details.

Admission requirements include:

1. a completed application to SOPHAS;
2. official transcripts for all previous undergraduate and graduate studies;
3. satisfactory GRE scores and letters of recommendation (two for master's applicants, three for doctoral applicants);
4. a statement of career goals that addresses research interests and long-term objectives;
5. resume or curriculum vitae;
6. for all international applicants: satisfactory scores on the Test of English as a Foreign Language (TOEFL) or the IELTS Academic Course Type 2 Exam and non-US institution transcripts verified by World Education Services (WES) or equivalent evaluation service;
7. appropriate experience in public health or a health-related field (applicable only for MPH and DrPH applicants);
8. and a master's degree in appropriate field or equivalent advanced professional degree (for DrPH and Ph.D. applicants).

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Degree Programs

MPH in Epidemiology

The Master of Public Health degree (MPH) with a major in epidemiology focuses on application of epidemiologic skills in public health settings. The usual completion time is two years, with a minimum of 43 credit hours

MSPH in Epidemiology

This degree program is designed to develop basic research skills in the epidemiologic study of health determinants and outcomes. The usual completion time is two years, with a minimum of 43 credit hours.

Ph.D. in Epidemiology

This degree program prepares an individual to pursue original investigations of diseases of unknown etiology and other health conditions or health behaviors, including the development of novel epidemiological approaches. Prerequisites: Content of BIOS 701, EPID 701, BIOS 710, BIOS 757, EPID 741. The usual completion time is three years, with a minimum of 54 credit hours.

MPH in Biostatistics

This degree program is designed for experienced public health professionals who wish to increase their analytical and statistical skills in a public health setting. Prerequisite: two semesters of calculus. The usual completion time is two years, with a minimum of 45 credit hours.

MSPH in Biostatistics

This degree program is designed to prepare researchers to pursue careers in biostatistics by providing them with concepts, principles, and skills necessary for scientific inquiry in the health sciences. Prerequisite: two semesters of calculus. The usual completion time is two years, with a minimum of 44 credit hours.

Ph.D. in Biostatistics

This degree program prepares an individual to become a theoretical or methodological biostatistician. It includes training in original analytic approaches to investigating health conditions and novel biostatistical approaches. Prerequisites: two semesters of calculus, one semester of linear algebra, and content of BIOS 701, EPID 701, BIOS 757, EPID 741, and advanced course work in applied statistics. The usual completion time is three years, with a minimum of 51 credit hours.

DrPH in Biostatistics

This degree program provides a practicing professional, who has an application area of interest, with the training to assume leadership roles in disseminating the culture and practice of biostatistics in that area. Prerequisites: content of BIOS 701, BIOS 710, and BIOS 757. The usual completion time is three years, with a minimum of 60 hours.

USC in Focus

For more than 200 years, USC has distinguished itself as a center of learning with a tradition of leadership and service in higher education. USC has a diverse and talented student population, a dedicated and successful faculty, a world-renowned library, outstanding research programs, and a campus that has been named one of the most beautiful in America.

The University offers more than 350 degree programs. Many programs are nationally and internationally ranked. If you want to learn more about the University of South Carolina, visit the Web site at www.sc.edu.

Information about the city of Columbia can be found at www.columbiasc.net or www.columbiacvb.com.



For More Information

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