About our program

The Epidemiology portion of the department prepares students to understand the distribution and risk factors for public health problems in the community. They learn to define, compute and interpret fundamental epidemiologic measures, explain the principles, strengths and weaknesses of epidemiologic study designs, know how to apply the fundamental techniques for selection of study populations, have experience with techniques for collecting data and evaluating quality of data, demonstrate basic skills for managing computer-based data, and demonstrate the ability to interpret and present the results of epidemiological research.

The Epidemiology degree programs are intended for those who wish to investigate the causes of disease occurrence in populations, including characteristics of individuals and their physical and social environment. Their findings are available to policy makers for guidance in actions to improve public health. The graduate programs in Epidemiology are designed to develop skills and capability in the practice and teaching of this discipline. Students are able to learn and participate in epidemiology first hand from faculty members (most are employees of the New York State Department of Health [NYSDOH] with University at Albany appointments) who are actively engaged in practicing epidemiology and addressing the public health problems and priorities of New York State.

The Biostatistics half of the department prepares students to serve as biostatistics researchers and as vital collaborators in public health projects, providing expertise on the use of statistics in analysis of public health data. Students acquire a foundation of knowledge in the core areas of statistical science, develop skills in defining a problem and determining the variables that are relevant to solving a public health problem, understand the appropriate use of data, the integrity of data sets, and how data can be used in analyzing public health issues.

The Biostatistics degree programs are intended for those who wish to develop statistical theory and skills to solve a wide range of public health and clinical problems. Whether focused on the analysis and communication of public health data in governmental agencies, or involvement in public health or clinical research, biostatisticians are an important part of multi-disciplinary, scientific teams. The graduate programs in Biostatistics are designed to develop the theoretical foundation for applied statistical methods, and the application of these methods in the health sector. Our close relationship with the NYSDOH provides unique opportunities for learning-by-doing in collaborative research. Current statistical research areas of the department include time series, categorical data analysis, Bayes methods, propensity scoring, survival analysis, stochastic processes, sample surveys, mixture models and measurement errors.