INTRODUCTION TO
BIOSTATISTICS

What is Biostatistics?

Biostatistics is a branch of statistics that interprets scientific data generated in the public health sphere. The overall goal of biostatistics is to examine and explore the data received and make valid inferences that will be useful in solving public health problems. Statistical methods are applied when conducting research in areas such as public health, biology and medicine.

Biostatistics has contributed to the understanding of several public health issues, such as:

- Chronic diseases
- Environmental Health
- Cancer
- AIDS
- Human growth and development

Role of Biostatisticians:

- Experts in data evaluation
- Translate complex, mathematical findings from clinical trials into meaningful information that can be used to make public health decisions

- Design and conduct experiments associated with health, safety and emergency management
- Collect and analyze data to improve public health programs
- Identify problems and solutions within the public health sector
- Interpret the results of their findings

Academic Pathways

Biostatisticians often complete their undergraduate degree in math or biology. A master's degree is usually a minimum requirement for many clinical, academic and governmental research positions. Many professionals in biostatistics decide to pursue graduate work by completing their Master of Public Health (MPH) or Master of Science degree.

- Many public health schools offer concentrations in biostatistics

Careers

- Biostatistician at the Centers for Disease Control and Prevention (CDC)
- Biostatistician at a leading biotechnology company
- Statistical analyst in the health insurance industry
- Surveillance program administrator in a state health department
- Senior consulting research statistician at a university
- Biostatistician in the pharmaceutical industry
- And many more!

ADDITIONAL
RESOURCES

*Click on the items below to visit its corresponding links

Kentucky Undergraduate Schools

- Eastern Kentucky University Admissions
- University of Kentucky Undergraduate Admissions
- University of Louisville Undergraduate Admissions
- Western Kentucky University Admissions

Kentucky Graduate Schools

- University of Louisville - Online Master of Science in Biostatistics
- 25 Best Biostatistics MPH Programs

Note: The schools listed are in partnership with C4FH. Public Health education opportunities may be available at other colleges and universities.