

# [Unit 1 epidemiology](https://assignbuster.com/unit-1-epidemiology/)

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Types of Epidemiology There are three different types of epidemiology: endemic, epidemic, and pandemic (Merrill, p. 6). Endemic is a disease that threatens people belonging to a particular location or to a distinct population. The disease is persistent and occurs within the expected level. For example, chicken pox reported each year in the U. S. is an endemic. Epidemic is an infectious disease that affects a great number of people at the same time. In this case, the disease jumps over the expected level over a given time period but stays within the defined population. The epidemic of plague that occurred in Philistines in 1320 B. C. converted into pandemic and spread in many countries around the globe. Pandemic is a disease or an epidemic that breaks out on a massive geographical area, starting from one region and spreading throughout the countries, continents and far away regions. One latest pandemic is swine flu that got transmitted worldwide very fast.   
Epidemiology and the Study of Biostatistics   
Epidemiology is the study of diseases in a population and biostatistics is the branch of statistic that deals with facts related to medical and health applications (Curtin University, 2011). Epidemiology supports biostatistics in that it provides statistics through describing disease patterns in a defined population, and provides data necessary for the administration, assessment and scheduling of services for the prevention, control and treatment of an infection. Biostatistics uses the methodologies used in epidemiological research and investigation. Also, biostatistics supports epidemiology in that it develops and applies statistical methods to epidemiological research. It designs studies and analyzes data from scientific investigation, and determines appropriate sampling techniques and data collection procedures that finally lead to better prevention programs. Hence, both epidemiology and biostatistics support each other.   
References   
Curtin University. (2011). Epidemiology and biostatistics. Public Health. Retrieved February 6, 2012, from http://publichealth. curtin. edu. au/programs/epidemiology\_biostatistics. cfm   
Merrill, R. M. (2011). Principles of Epidemiology Workbook: Exercises and Activities. USA: Jones & Bartlett Learning.