



Foundations of Public Health

Part I: Foundations of the Profession and Science of Public Health

EVIDENCE-BASED PUBLIC HEALTH

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Introduction

Given the limited resources that are available to meet the complex needs of populations, decisions on how to address public health problems must be evidence-based, meaning that they are based on accurate and complete data which have been rigorously analyzed. It is often important to have more detailed information about how the determinants of health or disease are distributed in a population. Are there subsets of the population that are more vulnerable, meaning that they have an increased probability of exposure to harmful factors? This can be influenced by social and political factors, behavior, and by geography. A related question is whether there are segments of the population that are more susceptible, meaning more likely to suffer adverse effects of an adverse exposure. This can be influenced by genetic constitution, age, and overall health status.

Learning Outcomes

After completing this module, the student will be able to:

- Describe the general steps involved in identifying and addressing public health problems.
- Describe and provide examples of the role of surveillance systems in public health.
- Explain how the characteristics of person, place, and time are used to formulate hypotheses in acute disease outbreaks and in studies of chronic diseases.
- Describe the difference between descriptive and analytic epidemiologic studies.
- Define and explain the distinguishing features of different types of studies.