

Public Health BS Epidemiology

Program Purpose

Epidemiology's main role is investigating the spread and causes of disease. Epidemiologists are particularly interested in understanding why some groups of people are healthier than others. The findings of epidemiologic studies help public health practitioners remove and control causes of disease to help a population be healthier. preventing the onset and spread of disease by finding causes-the reasons why some groups of people are healthier than others-then removing or controlling these causes. Sometimes epidemiologists are called "disease investigators." Epidemiology is the foundation of public health research. It studies chronic diseases (e.g. heart disease, cancer, and diabetes), infectious diseases (e.g. flu and HIV), outbreaks (e.g. salmonella poisonings), illness from exposure to something in the environment, illness related to people's genes, injuries and much more.

Curricular Structure

[Links to University Course Catalog, MAP sheet, and semester plans](#)

Learning Outcomes

Data Analysis and Presentation

Analyze and interpret data and present results in words, tables, charts, and graphs.

Courses that Contribute: HLTH 345 HLTH 440 HLTH 447 HLTH 449
Linked to BYU Aims: *Quantitative reasoning, Competence*

Epidemiologic Study Design

Design epidemiologic studies and compare and contrast study methodology.

Courses that Contribute: HLTH 345 HLTH 449 HLTH 493
Linked to BYU Aims: *Quantitative reasoning, Competence*

Critical Assessment of Epidemiologic Literature

Critique studies for their validity and contribution to the discipline.

Courses that Contribute: HLTH 449 HLTH 493
Linked to BYU Aims: *Think soundly, Competence*

Evidence of Learning

Data Analysis and Presentation

- HTLH 440 - Final Data Analysis Project
- HLTH 447 - Final Exam

Epidemiologic Study Design

- HTLH 449 - Exams
- HLTH 449 - Data-Based Homework assignments
- HLTH 493 - Capstone Project - Original Data Analysis and Report

Critical Assessment of Epidemiologic Literature

- HLTH 449 - Study Critique Assignment
- HLTH 493 – Systematic Literature Review

Learning and Teaching Assessment and Improvement

Direct measures provide necessary data for continuous quality improvement. Data from direct measures are collected and analyzed to determine areas of strength and weakness. Results provide important feedback for program improvement.

Assessment information is collected at the end of each winter semester and summer term. Conclusions of assessment findings are made and presented to department faculty for further discussion. Faculty ultimately agree on quality improvement actions to be taken in subsequent semesters.