Introduction to the Global Burden of Disease Project

Facilitator
Gillian Levine, PhD
Department of Medicine, Swiss Tropical and Public Health Institute and University of Basel

Description
Governments, policy-makers, public health institutions and funders require information on the causes of disease and death in the population to target available resources towards effective, high-impact public health interventions and approaches to improve survival and prevent illness. The Global Burden of Disease (GBD) project developed a framework and methodology for merging and assimilating, validating, analyzing and reporting health-related information on the burden of disease across countries and settings, to inform public health decision-making. GBD now provides the largest, most comprehensive estimates of risk factors, health, morbidity and mortality levels and trends globally. In this course, students will be introduced to the methods and tools used in and developed by the GBD project, to prepare them to understand and interpret the research outputs of the project, and to utilize the datasets and tools available from this project to inform their own research.

The following topics will be addressed:
- Definition and measures of disease burden in public health
- Sources of input data in GBD estimates
- Metrics and indicators reported and used by GBD
- Estimation methodology
- Accessing and using GBD datasets and reports
- Accessing and using GBD data visualization tools
- Strengths and limitations of GBD data and approach; considerations for analyses and interpretation

Objectives
By the end of this course, students will be able to:
- Describe the difference between measures of disease frequency, risk and burden and apply the appropriate measure to the appropriate public health objective
- Describe the goals of the GBD project
This course is an SSPH+ IGC initiative to provide post-doctoral scientists at SSPH+ network institutions to teach.

- Understand the basic GBD estimation methodology, sources and content of GBD input data
- Describe where and how to access GBD data, results and data visualization tools
- Describe key strengths and limitations of GBD approaches

Date 8 October 2024, 14:00 – 16:00

Level Basic. Pre-knowledge of basic epidemiologic concepts and measures of disease frequency, risk and association required (basic course in epidemiology).

Eligibility This course is open to PhD and MD students of the SSPH+ Inter-university Graduate Campus

Course Structure 2 hour online course, in real-time, consisting of lecture and presentation, as well as interactive activities with course participants to introduce them to online resources and tools. Reading materials and links to resources will be provided in advance and for further reference. Multiple choice quiz evaluating comprehension of course material.

Work load Preliminary Work: 0-2 h; Contact time: 2 h; Wrap-Up Work: 0-4 h

Credits (1 ECTS for active participation in 4 2h-online courses and 1 passed assessment in 1 course)

Assessment An optional assessment will be available for students who wish to earn the 1 ECTS. The assessment will provide students with a hands-on opportunity to explore GBD methods for estimation and the practical use of GBD estimates in public health decision-making.

Location Online course delivered via zoom

Course Fees SSPH+ PhD Students: 0.- CHF

Registration [https://www.conftool.com/ssph-phd-courses2024/](https://www.conftool.com/ssph-phd-courses2024/)

Deadline for registration 8 September 2024

This course is an SSPH+ IGC initiative to provide post-doctoral scientists at SSPH+ network institutions to teach.