

Understanding epidemiology for chemical risk assessment

Course details

This is a 3-day introductory epidemiological course for individuals who may need to critically evaluate epidemiological papers, reviews and reports relating to human health.

The aim of the course is to provide an introduction to epidemiological methods and related topics, to facilitate the critical evaluation of scientific literature on issues pertaining to the risk of adverse health outcomes from environmental, occupational and other hazards.

The course will take place over three consecutive days and will consist of a mixture of lectures, seminars and practical classes. Case studies and journal papers or reports from the fields of environmental, occupational and public health will be used to illustrate topics.

Learning objectives

At the end of the course the participants will be able to:

- read an epidemiological paper or report with understanding;
- appreciate the structure of, and advantages and disadvantages of the different epidemiological study designs;
- have an understanding of the basic analytical methods used in these studies;
- discuss the potential biases in epidemiological studies and understand the concepts of confounding and effect modification;
- interpret the results from published papers and evaluate their contribution to the risk assessment process;
- communicate with epidemiologists and statisticians.