



UniversityHospital Heidelberg

Institute of  
Public Health

# Climate Change and Health: Impact and Adaptations Strategies

May 3 – 14, 2010



## Content Overview

- Physico-chemical basis of anthropogenic climate change and its dynamics;
- Environmental impact of climate change
- Climate-sensitive diseases
- Health outcome linked to climate change and environmental impact
- Methods for assessing health impact
- Mitigation and adaptation strategies
- Policies for mitigation and adaptation and their evaluation

## Learning Objectives

Climate change has become a reality which the health community is only slowly taking into account. The potentially far-reaching adverse health effects, sometimes of irreversible nature, need to be understood by researchers, practitioners and public health institutions in order to develop and implement practices and policies to counter them. In low- and middle-income countries especially, the issues are poorly studied and understood.

The objective of this course is to provide participants with the ability to recognise the linkages between climate change and health and provide them with methods and tools to manage the impact of climate change on health. Examples will be drawn, whenever possible, from both developed and developing countries and cases studies will serve as a basis for learning.

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

1. Discuss and describe the physico-chemical basis of anthropogenic climate change and its dynamics;  
Specific objectives:
  - 1.1 explain the mechanisms of climate change
  - 1.2. explain the links between climate change and environmental impact
  - 1.3. illustrate the impact of climate change with regional examples
2. Describe the links between climate change and health impacts;  
Specific objectives:
  - 2.1 explain the concept of climate-sensitive diseases
  - 2.2 describe health outcomes linked to climate effects

- 2.3 identify mechanisms linking environmental conditions and health
3. Recognise effective methods to assess health impact;  
Specific objectives:
  - 3.1 review epidemiological methods evaluating health condition
  - 3.2 identify methodologies assessing health impact
4. Plan, implement, and evaluate mitigation and adaptation policies  
Specific objectives:
  - 4.1 differentiate the concepts of mitigation (equivalent to primary prevention) and adaptation (equivalent to secondary prevention)
  - 4.2 use mitigation and adaptation policies to derive possible alternatives
  - 4.3 analyse mitigation and adaptation policies and evaluate their effectiveness
5. Apply the concepts, methods and tools within a country or region in the form of a case study (synthesis).

## Learning Methods

The course is composed of individual teaching units (50%), facilitated group work (30%) and self-directed learning (20%).

The group work will include case studies at the regional or national level that focus on specific regions of interest selected by the participants. This facilitates the participants' achievement of the learning objectives and demonstrates the applicability of the concepts and methods to specific regional settings.

Because the topic of the course lies at the crossroad of several scientific disciplines, lecturers will be from a variety of fields including geography, climatology, biodiversity, modelling, epidemiology, public health and medicine. An appropriate mix of knowledge-transfer methods such as lectures, films, case study, critical incidents etc., will be used to insure that material that is new to most participants is communicated effectively. Each session has specific objectives and short key readings.

## Assessment Procedures

Course participants are expected to attend teaching sessions and actively participate in class discussions and group work. Assessment of participants' achievement of the learning objectives will be determined as follows:

- 50% individual final written exam composed of 2 or 3 short essay questions
- 30% group written report of case study (3 pages)
- 20% group oral presentation of case study

## Duration / Accreditation

2 weeks / 90 hours; Full time attendance required.  
3 ECTS (tropEd)

## Target Group / Prerequisites

Public health professionals, project planners and managers, paramedical staff, social scientists, tropEd students, etc. The course is held in English. Fluent English (Reading, Speaking and Writing) is required for the course.

## Course Fee

General Admittance	€ 1.200,-
tropEd students	€ 750,-

Unfortunately, the Department cannot offer any scholarships. A non-refundable registration fee of € 200 is included in the course fee. The course fee covers coursework, printed materials, coffee breaks and a pass for the Heidelberg public transportation system, but it does not include accommodation, insurance or other personal living costs during the stay.

## Registration

Please register as soon as possible as the number of participants is limited. First come, first serve.

Registrations are as such possible as long as seats are still available, but please keep in mind the time you need for travel and visa arrangements.

## Contact

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## Course Coordinators

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## Master of Science in International Health

The MSc. programme begins with a three month Core Module that introduces students to the field of International Health. Students then enter either the fixed set of advanced modules at Heidelberg or choose among a wide range of courses within the tropEd network. A Masters Thesis must also be completed. For more information please contact [MSc\\_IH@uni-heidelberg.de](mailto:MSc_IH@uni-heidelberg.de).

## tropEd

TropEd is a network of over 30 institutions for higher education in international Health. It offers a flexible modular structure and the European-wide recognition of a Masters Degree in International Health. ECTS credits towards the Masters in International Health will be provided for the accredited modules offered at Heidelberg. More information on tropEd: [www.tropEd.org](http://www.tropEd.org).

## Short Course in International Health tropEd Advanced Modules 2010

**Macro-Political Aspects of Social Security Systems**  
January 25 – 29, 2010

**Disease Control: Strategies and Policies**  
January 25 – February 5, 2010

**Financing Health Care – Principles of Insurance**  
February 8 – 19, 2010

**Reproductive Health Services and HIV/AIDS:  
New Evidence and Strategy**  
February 22 – March 5, 2010

**Leadership and Change Management**  
March 8 – 19, 2010

**Improving the Quality of Healthcare Services**  
March 22 – April 2, 2010

**Consultancy Skills in International Cooperation in Health  
Evaluation of Health Facilities, Projects  
and Programmes**  
April 19 – 30, 2010; September 6 – 17, 2010

**Proposal Writing as a Consultancy Skill**  
May 3 – 7, 2010

**Health and Climate Change:  
Impact and Adaptation Strategies**  
May 3 – 14, 2010

**Public Health and Disasters**  
May 17 – 28, 2010

**Using Research for Better Practice  
in International Health**  
May 17 – 28, 2010

**Facility Management**  
June 21 – July 2, 2010

**Quality Management in International Health**  
July 5 – 16, 2010

**Health and Human Rights**  
September 20 – October 1, 2010

**Economic Principles of Social Security**  
October 25 – November 5, 2010

**Financial Management and Controlling  
in Health Insurance**  
November 29 – December 10, 2010