



**Karolinska  
Institutet**

Course syllabus for

# **Public Health Response in Disasters, 20 credits**

Hälsoinsatser vid katastrofer, 20 hp

This course syllabus is valid from spring 2021.

Please note that the course syllabus is available in the following versions:

[Autumn2013](#) , [Autumn2015](#) , [Autumn2017](#) , [Spring2018](#) , [Spring2020](#) , [Spring2021](#) , [Spring2022](#) , [Autumn2022](#)

Course code	2QA236
Course name	Public Health Response in Disasters
Credits	20 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Public Health in Disasters
Level	Second cycle, has only first-cycle course/s as entry requirements
Grading scale	Excellent, Very good, Good, Satisfactory, Sufficient, Fail, Fail
Department	Department of Global Public Health
Decided by	Styrelsen för utbildning
Decision date	2014-06-23
Revised by	Education Committee GPH
Last revision	2021-03-15
Course syllabus valid from	Spring 2021

## **Specific entry requirements**

A professional degree of at least 120 credits in health care or medicine. In addition to this, work experience within one of the above mentioned fields is required (has to be certified by the employer). Alternatively a degree of at least 180 credits and work experience within a relevant field (such as aid and international organisations, certified by the employer/organisation). And proficiency in English equivalent to English B/English 6.

## **Objectives**

The aims of the course are to provide competencies, to adequately prioritize, plan, implement and monitor public health interventions in disaster relief, based on needs and risks.

### **Module 1**

On completion of the course, the student should be able to:

*Knowledge and understanding*

- explain how different health determinants influence vulnerability and a society's ability to cope

with disasters.

- define various types of disasters and describe how they can be prevented, as well as how their negative influence on the public health and health systems can be mitigated.

#### *Skills and abilities*

- in a multistage process explain and plan how data and information about health risks and health needs can be sought, analysed and assessed in disasters.

#### *Judgement and approach*

- evaluate how various types of disasters influence public health.

### **Module 2**

On completion of the course, the student should be able to:

#### *Knowledge and understanding*

- describe the role of health systems in disasters
- describe essential health interventions in different types of disasters
- explain principles of and handling of mass-casualty situations
- explain the principles of evaluation health systems and of health actions at disaster actions.

#### *Skills and abilities*

- plan for essential health interventions in different types of disasters
- plan for epidemiological surveillance in disasters situations.

#### *Judgement and approach*

- relate to disaster response systems, their potentials and weaknesses.
- prioritize among different strategies intended to meet the essential public health needs in disasters.
- argue for the most important components for control of infectious diseases.

## **Content**

The course is divided in two modules:

#### Module 1

- Global health and the global burden of disease
- Health determinants and their variation at global, regional, national and local level
- The indirect and direct effects of disasters on health and health systems
- Assessment of public health needs in disasters

#### Module 2

- Planning and implementation of curative and preventive public health interventions in different types of disasters and contexts
- Principles for and handling of mass-casualty situations
- Epidemiological surveillance in disasters
- Control of infectious diseases
- International systems for disaster response
- Evaluation of public health response in disasters

### **Pre-disaster and Disaster Situations - Global Perspective, 8.0 hp**

Grading scale: AF

The course module focuses on the global burden of disease and factors that determine variations in the public health with a focus on low-income countries. The course highlights and analyses general and directed health strategies intended to improve global health. The course module also focuses on health-related needs in various types of disasters and methods for analysis and assessment of public health and health-related needs in disasters.

## **Public Health Response in Disasters, 12.0 hp**

Grading scale: AF

The part of the course follows after assessments of health-related needs in a disaster. Important fields are: Priorities and organisation of health actions, epidemiological supervision and control of infectious diseases. Specific strategies for mass-casualty situations and industrial disasters are highlighted. The module is completed with methods and principles of evaluation of health actions.

## **Teaching methods**

Interactive lectures. Web-based assignments in groups and individual, compulsory simulation exercises and compulsory discussion seminars. The student will practice and show ability to gather and analyse information related to disasters in the simulation exercises. The student will describe health systems and describe, plan and prioritize essential health interventions in, in the simulation exercises.

## **Examination**

The two modules will be examined in two written examinations. Each module, also have compulsory parts, where active participation is required.

### *Module 1.*

The examination consists of a written exam.

### *Module 2.*

The examination consists of written exam.

The student will receive a final grade for the whole course (A-F). The final grade is an appraisal of the results in the two individual examinations. In order to pass the course, the student must obtain at least grade E in both the individual examinations and as well have met the established criteria for the obligatory parts.

### **Compulsory participation**

The examiner assesses if, and in that case how, absence can be compensated. Before the student has participated in all compulsory parts or compensated absence in accordance with the examiner's instructions, the student's results for respective part will not be registered. Absence from a compulsory activity may result in that the student cannot compensate the absence until the next time the course is given.

### **Limitation of number of occasions to write the exam**

Students who have not passed the regular examination are entitled to participate in five more examinations. If the student has not passed the exam after four participations, he/she is encouraged to visit the study advisor. If the student has failed six examinations/tests, no additional examination or new admission is provided.

The number of times that the student has participated in one and the same examination is regarded as an examination session.

Submission of blank exam is regarded as an examination session. An examination for which the student registered but not participated in, will not be counted as an examination.

If there are special grounds, or a need for adaptation for a student with a disability, the examiner may

decide to deviate from the syllabus's regulations on the examination form, the number of examination opportunities, the possibility of supplementation or exemptions from the compulsory section/s of the course etc. Content and learning outcomes as well as the level of expected skills, knowledge and abilities may not be changed, removed or reduced.

## Transitional provisions

Examination will be provided during a time of two years after a possible cancellation of the course. Examination can take place according to an earlier literature list during a time of one year after the date when a major renewal of the literature list has been made.

## Other directives

The course will be given in English.

Course evaluation will be carried out according to the guidelines that are established by the Committee for Higher Education. The course may not be included in a higher education qualification at the same time with the overview and passed course, whose contents completely or partly corresponds to the course content.

## Literature and other teaching aids

### Part 1

#### *Required reading*

#### **Health in Humanitarian Emergencies : Principles and Practice for Public Health and Healthcare Practitioners**

*Townes, David*

Cambridge : Cambridge University Press, 2018 - 1 online resource (504 pages)

ISBN:9781107477261 LIBRIS-ID:nxptc9rxl8xz7jq8

URL: [Table of contents / Abstracts](#)

[Library search](#)

*Jacobsen*

#### **Introduction to Global Health**

Jones and Bartlett Learning, 2018

LIBRIS-ID:22540864

*Chan, Emily Ying Yang*

#### **Public health humanitarian responses to natural disasters**

Milton Park, Abingdon, Oxon : Routledge, 2017 - 259 pages

ISBN:9781138953680 LIBRIS-ID:20113522

[Library search](#)

*Howard, Natasha; Sondorp, Egbert; Veen, Annemarie ter*

#### **Conflict and health**

Maidenhead, Berkshire, England : McGraw Hill/Open University Press, 2012. - xvii, 197 pages

ISBN:9780335243792 (pbk.) LIBRIS-ID:18062121

[Library search](#)

**Humanitarian needs assessment : the good enough guide**

Rugby : Practical Action Publishing, [2014] - xi, 108 pages

ISBN:9781853398636 LIBRIS-ID:18060371

[Library search](#)

***Recommended reading***

**Handbook IMCI Integrated management of childhood illness**

Geneva : World Health Organization, 2005 - 163 s.

LIBRIS-ID:11929400

URL: [Länk](#)

**Rapid health assessment in refugee or displaced populations**

Médecins Sans Frontières, 2006

**Refugee health : an approach to emergency situations**

London : MacMillan, 1997 - 380 s.

ISBN:0-333-72210-8 LIBRIS-ID:8283641

[Library search](#)

*Schreeb, Johan von*

**Needs assessment for international humanitarian health assistance in disasters**

Stockholm : 2007 - 95 s.

ISBN:978-91-7357-375-7 LIBRIS-ID:10599321

URL: [Online](#)

[Library search](#)

**WHO child growth standards and the identification of severe acute malnutrition in infants and children**

WHO/Unicef, Geneva, 2009

**Public health guide in emergencies**

John Hopkins School of Public Health, International federation of Red Cross red Crescent Societies, 2008

**Part 2**

***Required reading***

*Beck, Tony*

**Evaluating humanitarian action using the OECD-DAC criteria An ALNAP guide for humanitarian agencies**

ALNAP, Active Learning Network for Accountability and Performance, 2006

*Checchi, Gayer, Freeman Grais and Mills*

**Public health in crisis- affected populations A practical guide for decision-makers**

Humanitarian Practice Network at ODI , HPN, 2007

*Connolly, M. A.*

**Communicable disease control in emergencies : a field manual**

Geneva : World Health Organization, c2005. - vii, 295 p.

ISBN:92-4-154616-6 LIBRIS-ID:10160940

[Library search](#)**Handbook for emergencies, 3d edition**

UNHCR© United Nations High Commissioner for Refugees, Geneva, 2007

**Humanitarian needs assessment : the good enough guide**

Rugby : Practical Action Publishing, [2014] - xi, 108 pages

ISBN:9781853398636 LIBRIS-ID:18060371

[Library search](#)

*Norton, I; et al.*

**Classification and minimum standards for foreign medical teams in sudden onset disasters.**

Geneva: World Health Organization, 2013

URL: [http://www.who.int/hac/global\\_health\\_cluster/fmt\\_guidelines\\_september2013.pdf](http://www.who.int/hac/global_health_cluster/fmt_guidelines_september2013.pdf)

**The Sphere handbook, Humanitarian Charter and Minimum Standards in Humanitarian Response**

The Sphere project, 2011

*Chan, Emily Ying Yang*

**Public health humanitarian responses to natural disasters**

Milton Park, Abingdon, Oxon : Routledge, 2017 - 259 pages

ISBN:9781138953680 LIBRIS-ID:20113522

[Library search](#)***Recommended reading*****Clinical guidelines: Diagnosis and treatment manual for curative programmes in hospitals and dispensaries:**

Médecins sans Frontières, 2010

**Essential drugs: Practical guidelines**

Médecins sans Frontières, 2011

**Manual for the health care of children in humanitarian emergencies:**

WHO, Geneva, 2008

**Medical response to major incidents and disasters : a practical guide for all medical staff**

*Lennquist, Sten*

Heidelberg : Springer, c2012. - xxiv, 412 p.

ISBN:978-3-642-21894-1 (alk. paper) LIBRIS-ID:13597503

[Library search](#)**Pocket book of Hospital care for children: Guidelines for the management of common illnesses with limited resources**

WHO, Geneva, 2005

**Pregnancy, childbirth, postpartum and newborn care: A guide for essential practice**

WHO, 2003

**Rapid health assessment in refugee or displaced populations**

Médecins Sans Frontières, 2006

**Refugee health : an approach to emergency situations**

London : MacMillan, 1997 - 380 s.

ISBN:0-333-72210-8 LIBRIS-ID:8283641

[Library search](#)

**WHO child growth standards and the identification of severe acute malnutrition in infants and children**

WHO/Unicef, Geneva, 2009

*Young, Helen; Jaspars, Susanne*

**The meaning and measurement of acute malnutrition in emergencies: a primer for decision-makers**

Humanitarian Practice Network at ODI , HPN, 2006

**Public health guide in emergencies**

John Hopkins School of Public Health, International federation of Red Cross red Crescent Societies, 2008

Articles and lecture presentations, which will be provided during the course.