



TM 66 – Environmental Health and Disaster Management

Objectives:

Provide an overview of key environmental health urban and regional infrastructure and how this can be affected by natural disasters and climate change, e.g. stormwater.

Understand what should be considered to mitigate the environmental health risks under and after a disaster and in relation to contingency planning.

To include national and international experience concerning disaster management.

Provide guidance on responding, assessing and addressing the environmental health impacts of a disaster using a population-based focus.

Increase focus on disaster risk reduction (DRR).

The working language at this course is English

Target group:

Environment and Health professionals and emergency specialists from local, regional and national authorities in Denmark as well as from abroad. Students may participate as well.

Venue:

[Danhostel Kalundborg](#), Stadion Alle 5, 4400 Kalundborg

Date:

22nd & 23rd March 2017

Program:

See next pages

Arranged by:

Ole Winther Christensen, Kalundborg Municipality
Henning I Hansen, Aarhus Municipality in co-operation with Griffith University, Australia and National Environmental Health Association, USA

Number of participants:

Minimum 25 participants and max. 35 participants

Price:

Non-members of EnviNa: DKK 4.000-
(incl. meals and accommodation 22nd - 23rd March.)

Registration:

Deadline: 20th of February 2017. The registration is binding.



Description of the course

The main teacher, Tim Hatch, Deputy Director Alabama Department of Health, USA is a highly qualified and experienced professional in Environmental Health and Disaster Management. Tim leads their Environmental Health Training for Emergency Response course and the Healthcare Leadership course. Tim's on-site experience on disaster responses include: Hurricane Ivan (2004), Hurricane Katrina (2005), Kentucky Ice Storm (2009), widespread water outage in rural Alabama (2009), Gulf Oil Spill (2010), and Alabama Tornadoes (2011). Tim has spent the last few years responding to disasters across the south of America and he has gained much experience how environmental health in regard to disaster preparedness and response. Tim is as well Sessional Lecturer at Griffith University, NEHA Global Program Manager and an Accredited USA - CDC Trainer.

Lars Nordahl Lemvig, Director of Trekantområdets Fire Department I/S will share his experience on lessons learned from a large fire on a Danish industrial harbor area (The Port of Fredericia).

Casper Bæk Nielsen, Chief Emergency Planner, Østjylland Fire Department I/S will introduce Contingency Planning in Denmark.

In Denmark we have a basically well-consolidated emergency response system and an extensive contingency planning which already integrate many actors and professional disciplines. This course is intended to contribute to the continued development of disaster management as a discipline and to showcase best practises based on national as well as international experience. Denmark has in general been spared for major natural disasters due to our location. In Denmark we on the other hand experience more frequently flooding and extreme weather conditions due to climate change. This increases the requirements for preparedness and cooperation between several professional disciplines. This also increase the requirements in order to ensure our infrastructure and finally it increases the requirements in relation to our contingency planning in general in order to prevent and avoid these extreme natural phenomena to develop into disasters. Many elements in this course are just as well relevant in relation to other types of disaster / accident situations besides natural disasters.

Background

There has been a steady increase in the quantity and frequency of disasters in the past few decades¹. During the last quarter century, more than 3.4 million lives have been lost due to disasters, with billions more affected, and tens of billions of dollars spent on repairing damage and reconstructing lives². During this period 90 per cent of the natural disasters, 72.5 per cent of casualties and 75 per cent of economic losses were caused by weather, climate and water related hazards such as droughts, floods, windstorms, tropical cyclones, storm surges, extreme temperatures, landslides and wild fires, or by health epidemics and insect infestations³.

Good environmental health disaster management has a significant role in disaster risk reduction by addressing the impact of disasters on environmental health infrastructure and consequently the public⁴. This includes protecting and mitigating risks to systems required for general health and wellbeing, such as water supply, food safety, sewerage, waste management and stormwater^{5,6}.

¹ De Smet, H., Lagadec, P. and Leysen, J. (2012), Disasters Out of the Box: A New Ballgame?. Journal of Contingencies and Crisis Management. doi: 10.1111/j.1468-5973.2012.00666.

² Hogan D, Burstein J (2007). Basic Perspectives on Disaster. Lippincott Williams and Wilkins, Philadelphia.

³ World Meteorological Organization. WMO Disaster Risk Reduction Programme. Accessed 23 February 2012; Available from: <http://www.wmo.int/pages/prog/drr/>

⁴ Ryan, B., Davey, P., Fabien, N., Kalis, M., & Miller, M. (2014). Capacity Building for Environmental Health Disaster Management. Environment and Health International. 2013, 1(1).

⁵ Ryan, B., Milligan, B., Preston-Thomas, A., & Wilson, G. (2013). Environmental health disaster management: A new approach. *Australian Journal of Emergency Management, The*, 28(1), 35.



As the world's population and density continues to increase, the risk disasters pose to environmental infrastructure and conditions will continue to rise. Furthermore, increased urbanisation and industrialisation place a greater proportion of the world community at risk with the majority of the population migrating to urban disaster-prone areas that are often without an adequate level of environmental health protective infrastructure⁷.

An example is the combination of allowing residential districts in low-lying coastal areas in order to expand sub cities and more extreme weather situations, which causes increasing flooding problems.

This short course will introduce the critical role you may have in mitigating environmental health risks during a response to a disaster. This includes disaster risk reduction strategies such as the need to conduct assessments to identify and address key risks such as those relating to drinking water, shelters, overcrowding, food safety, wastewater, disease-causing vectors, solid waste and hazardous materials. Many of these risks are within the existing roles of many environmental and health professionals, however, a disaster response has unique challenges and a specific skill set is required from a range of professions and all levels of government.

The content of the short course is guided by a partnership between EnviNa, Denmark Griffith University, Australia and National Environmental Health Association (USA).



⁶ Commonwealth of Australia (2008). Report of the 6th National Conference - Sustaining Environmental Health in Indigenous Communities.

⁷ World Health Organization. Statistical Information System Page. Accessed 30 May 2011. Available at <http://www.who.int/whosis>



TM 66 – Environmental Health and Disaster Management

Program Wednesday 22nd of March 2017

- Kl. 08.30 – 09.00 Arrival and registration – Coffee / Tea
- Kl. 09.00 – 09.30 Welcome and introduction
w/Ole W. Christensen, Kalundborg Municipality,
Henning Hansen, Aarhus Municipality and
Tim Hatch, Alabama Department of Health, USA.
- Kl. 09.30 – 10.30 Environmental health aspects of disasters
w/Tim Hatch, Alabama Department of Health, USA
- Kl. 10.30 – 11.00 Break
- Kl. 11.00 – 11.30 Understanding Disaster Risk and the Sendai Framework
w/Tim Hatch, Alabama Department of Health, USA and
Henning Hansen, Aarhus Municipality
- Kl. 11.30 – 12.00 Disaster management arrangements
w/Tim Hatch, Alabama Department of Health, USA
- Kl. 12.00 – 12.30 Responder safety
w/Tim Hatch, Alabama Department of Health, USA
- Kl. 12.30 – 13.15 Lunch
- Kl. 13.15 – 14.30 Contingency Planning in Denmark
w/Casper Bæk Nielsen, Østjylland Fire Department I/S
- Kl. 14.30 – 14.45 Break – Coffee / Tea
- Kl. 14.45 – 15.30 Waste water in an emergency setting
w/Tim Hatch, Alabama Department of Health, USA
- Kl. 15.30 – 17.00 Lessons learned from a large fire on a Danish industrial
harbor area
w/Lars Nordahl Lemvig, Trekantområdets Fire
Department I/S
- Kl. 17.00 – 18.30 Break and quartering to the hotel room
- Kl. 18.30 Dinner followed by social get-together/ networking.



Program Thursday 23th of March 2017

- Kl. 07.30 – 08.30 Breakfast
- Kl. 08.30 – 09.15 Situational awareness
w/Tim Hatch, Alabama Department of Health, USA
- Kl. 09.15 – 10.00 Communicable disease and risk management in a
disaster setting
w/Tim Hatch, Alabama Department of Health, USA
- Kl. 10.00 – 10.30 Pests control
w/Tim Hatch, Alabama Department of Health, USA
- Kl. 10.30 – 11.00 Break
- Kl. 11.00 – 11.45 Solid waste and debris
w/Tim Hatch, Alabama Department of Health, USA
- Kl. 11.45 – 12.45 Evacuation centers and shelters
w/Tim Hatch, Alabama Department of Health, USA
- Kl. 12.45 – 13.30 Lunch
- Kl. 13.30 – 14.45 Drinking water
w/Tim Hatch, Alabama Department of Health, USA
- Kl. 14.45 – 15.50 Disaster response strategies and exercise
w/Tim Hatch, Alabama Department of Health, USA

(Coffee and Tea during session)
- Kl. 15.50 – 16.00 Conclusions, evaluation and end of the course

Working language: English



Sign up using this form

Registration as soon as possible and no later than February 20th 2017

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Name:

Email:

Company / Organisation:

Reg. Company Number:

Address:

Postal code:

City:

Country:

Course Cost: DKK 4.000 (including accommodation 22-23.03.2017 and meals)
An invoice will be sent after the course

Registration is binding

Registration is sent to Berith Pedersen: mail@envina.dk