

## Short Course

### Introduction to Environmental Health and Disasters (6 and 7 February 2014)

*Facilitated by:*

*Dr Peter Davey, President, IFEH*

*Ben Ryan, Director, Disaster Risk Reduction, Asia-Pacific, IFEH*

*Tim Hatch, Alabama Department of Health; Director, Disaster Risk Reduction, Americas, IFEH*

#### Short Course Objectives

- Introduce how environmental health infrastructure and practices are linked to healthy cities, communities and healthy people.
- Provide an overview of key environmental health urban and regional infrastructure and how this can be affected by natural disasters and climate change.
- Understand what should be considered to mitigate the environmental health risks after a disaster.
- Provide guidance on responding, assessing and addressing the environmental health impacts of a disaster using a population-based focus.

#### Background

There has been a steady increase in the quantity and frequency of disasters in the past few decades<sup>1</sup>. 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 lives<sup>2</sup>. Between 1980 and 2005, 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 infestations<sup>3</sup>.

Good environmental health disaster management has a significant role in addressing the impact of disasters on environmental health infrastructure and consequently the public. 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<sup>4</sup>.

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 infrastructure<sup>5</sup>.

This short course will introduce the critical role you may have in mitigating environmental health risks during a response to a disaster. This includes 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 the International Federation of Environmental Health (IFEH), Centers for Disease Control and Prevention (CDC), National Environmental Health Association (USA), Environmental Health Australia and Redland City Council.

**Please note: This course provides an introduction to the Environmental Health and Disaster Management course held annually in Townsville.**

<sup>1</sup> 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.

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

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

<sup>4</sup> Commonwealth of Australia (2008). Report of the 6th National Conference - Sustaining Environmental Health in Indigenous Communities.

<sup>5</sup> World Health Organization. Statistical Information System Page. Accessed 30 May 2011. Available at <http://www.who.int/whosis>



## PROVISIONAL AGENDA

Location: Redland IndigiScapes Centre, 17 Runnymede Rd, Capalaba QLD 4157

### Thursday 6 February 2014

- 08.30-09.30 Welcome and introductions  
*Dr Peter Davey, President, International Federation of Environmental Health*  
*Ben Ryan, Director, Disaster Risk Reduction, International Federation of Environmental Health*  
*Tim Hatch, Alabama Department of Health (CDC nominee); Director, Disaster Risk Reduction, Americas, IFEH*
- 9.30-10.30 Environmental health aspects of disasters
- 10.30-11.00 *Break*
- 11.00-11.30 Bushfires and environmental health
- 11.30-12.00 Queensland disaster management arrangements
- 12.00-12.30 Responder safety
- 12.30-13.15 Lunch*
- 13.15-14.00 Waste water
- 14.00-14.45 Food safety
- 14.45-15.00 Break*
- 15.00-17.00 Solid waste and debris

### Friday 7 February 2014

- 8.30-9.15 Situational awareness
- 9.15-10.00 Local city/community planning and links with disaster management
- 10.30-11.00 Break*
- 11.00-11.45 Vectors and pests
- 11.45-12.45 Evacuation centres and shelters
- 12.45-13.30 Lunch*
- 13.30-14.15 Drinking water
- 14.15-16.00 Disaster response strategies and exercise

### Target Audience

Environmental health specialists, professionals and students who plan to broaden their understanding of the role environmental health has during the preparedness and response phases of disaster management. Participants can be from the local, provisional, state, federal, international and private sectors.

### Course Cost

EHA Member \$550 including GST  
Non-member \$770 including GST

### Registration

See [www.eh.org.au](http://www.eh.org.au)

### Further Information

Ben Ryan  
Director, Disaster Risk Reduction  
International Federation of Environmental Health  
Email: [benjamin.ryan@my.jcu.edu.au](mailto:benjamin.ryan@my.jcu.edu.au)

**In partnership with the Centers for Disease Control and Prevention (CDC), USA**