Objectives
- Demonstrate how environmental health infrastructure and practices are central to disaster management and humanitarian activities
- Provide an overview of key environmental health infrastructure and how this can be affected by natural disasters
- Understand what should be considered to mitigate environmental health risks in disaster and humanitarian settings
- Explore best-practice for assessing, addressing and responding to environmental health impacts of a disaster and a humanitarian crises using a population focus

Background
There has been a steady increase in the quantity and frequency of natural disasters in the past few decades. 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.

This increase has been felt across Indonesia. Recent examples include the volcano eruption in Java, Mentawi earthquake and tsunami, Padang earthquake, Wasior floods, Merapi eruption, Yogyakarata earthquake and the Aceh and Nias tsunami.

A key step towards mitigating the risk of these disasters on public health is to ensure environmental health professionals, engineers, disaster management specialists and academics are equipped to prepare and systematically respond to disasters.

Central to this is good environmental health disaster management practices. 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.

As Indonesia’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.

This 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 course is supported by a partnership between Griffith University Humanitarian and Disaster Initiative, Universitas Airlangga, International Federation of Environmental Health (Asia-Pacific), Centers for Disease Control and Prevention (CDC) and Aspen Medical.

PROVISIONAL PROGRAM

Environmental Health Department (Room TBA), Universitas Airlangga, Surabaya, East Java, Indonesia

Monday 28 April
9.00-10.00 Welcome and introduction
Professor Mukono, Universitas Airlangga; Indonesia Environmental Health Specialists Association
Dr Davey, President, International Federation of Environmental Health

10.00-10.30 Break
10.30-12.30 Workshop – humanitarian standards for disasters
12.30-13.30 Lunch
13.30-14.00 Environmental health aspects of disasters and humanitarian crisis
14.00-14.30 Communicable disease and risk management in a disaster setting
14.30-15.00 Break
15.00-15.45 Non-communicable diseases in disaster and humanitarian settings
15.45-16.30 Disaster management arrangements

Tuesday 29 April
9.00-9.45 Evacuation centre and shelters
9.45-10.30 Wastewater
10.30-11.00 Break
11.00-11.30 Food safety
11.30-12.00 Drinking water
12.00-12.30 Vectors and pests
12.30-13.30 Lunch
13.30-14.15 Solid waste and debris
14.15-14.45 Prevention and planning strategies
14.45-15.30 Exercise (including break)
15.30-16.00 Award ceremony

Target Audience
Environmental health professionals, engineers, disaster management specialists, academics 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
Indonesia participant – Rp. 530,000 (AUD$50)
Student – Rp.220,000 (AUD$20)
International participant from medium income country (e.g. Singapore) – Rp. 1,000,000 (AUD $100)
International participant from high income country (e.g. Australia and USA) – Rp. 1,600,000 (AUD$150)

Registration and further information
- Indonesia participants please contact Professor Mukono via e-mail mukono.j@fkm.unair.ac.id
- International participants please contact Mr Ryan via e-mail: benjamin.ryan@my.jcu.edu.au

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