Oceania



82 Centers For Disease Control (CDC) Of Pacific Emergency Health Initiative (PEHI)

BACKGROUND

Pacific island countries or territories (PICTs) have the largest environmental disaster burden of any region in the world. During 1990-1999, this region lead the world in per capita disaster mortality, cumulative percentage of total population affected, per capita disaster damage costs, and the ten largest earthquakes on the Richter scale Pacific islands are particularly vulnerable to disaster hazards with limited capacity to respond and recover. Studies identified serious deficiencies among Pacific island nations in healthcare, medical workforce, and health facilities. Organizational and technological solutions to environmental emergencies developed in industrialized nations are not practical for small-island developing states where human and technological resources are scarce and expensive.

OBJECTIVES

The overall objective was to strengthen the capacity for emergency preparedness and response among all PICTs.

Specific objectives were:

- Measure and assess emergency preparedness among developing health and medical systems
- Facilitate the development of emergency operations plans among developing health sectors
- ■Develop a sustainable indigenous source for emergency health training and education



There were three major activities.

- ■Vulnerability assessment, which includes
- · Hospital and public health emergency preparedness
- · Public health and medical infrastructure mitigation
- Education and training, which includes
- · Emergency care
- · Emergency health planning
- · Public health and medical consequences of disasters
- Technical assistance, which includes
- · PEHI-NET- an Internet-based information and

communication tool

- PEHI-HELP onsite emergency consultation
- ADEPT an Automated Emergency and Disaster Planning Tool for developing hospital and public health disaster plans

ACHIEVEMENTS

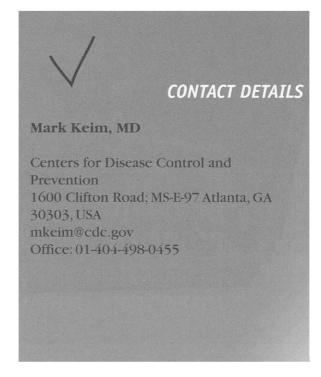
- Founded the Palau Pacific Center for Emergency Health in 2001 to serve as a regional center for training and education in the Pacific region.
- Performed public health vulnerability assessments in 11 PICTs
- Completed all-hazard public health emergency operations plans for three PICTs
- ■Completed hospital disaster plans for three PICTs
- Developed PEHI-NET, an Internet-based information and communication tool available to all PICTs.
- Trained more than 500 Pacific medical and public health officials in emergency preparedness and response, including 6 Health Ministers and Secretaries of Health.
- ■Published a special issue of the regional public health journal, Pacific Health Dialog, on emergency health in the Pacific
- Established a fire protection training exchange program between the Republic of Palau and U S.A. fire departments
- ■Provided emergency technical assistance to the Federated States of Micronesia in response to the 2002 landshide.
- ■Hosted four annual international conferences on public health preparedness among the Pacific island nations.
- Developed and tested the Automated Disaster and Emergency Planning Tool (ADEPT)
- ■Organized the two annual regional emergency drills
- ■Provided technical assistance involving mass gathering management for the 2004 Pacific Arts Festival
- ■Institutionalized medical "First Responder" course within Palau Community College.
- Developed and coordinated the 2004 Pacific Health Summit for Sustainable Disaster Risk Management, a region-wide strategic planning session involving 18 regional health ministers and secretaries of health

LESSONS

- Development of educational training packages must be done with local providers and set within the cultural context of the target population.
- ■Disaster education will require, especially in the initial stage, the support and buy-in from a wide spectrum of community agencies and leaders
- ■Sustainability can only be achieved if the target population sees a utility in education and participation
- ■External disaster and risk management workshops have limited value External workshop provide the key learning tools but sustainability can only manifest itself when these tools are used in day-to-day activities or become part of the education system.
- ■One of the best ways to ensure long term change within a population is through the education of the youth.
- ■Risk reduction programs must and can be economically feasible at community level and easily integrated into daily living patterns.

FUTURE

- ■Greater penetration at the community level on awareness raising and disaster management education utilizing accepted community groups such as Boy Scout, Peace Corps, informal leadership
- Development of disaster awareness curriculum for schools
- ■Representatives from the Pacific Summit for Sustainable Disaster Risk Management will present their declaration at the UN World Conference for Disaster Reduction at Kobe, Japan, January 2005.



83 Tertiary Disaster Management Education By Distance Learning

BACKGROUND

Charles Sturt University's emergency/ disaster management education programs are the only ones of their type currently on offer around the world What makes them unique is that both the undergraduate and post-graduate degree programs are studied completely by distance education, with no residential component. Therefore, students around the world can avail themselves of an emergency/ disaster management tertiary degree course from the comfort of their home.

The undergraduate program had its origins in the late 1980s developed initially by emergency/ disaster management professionals as a means to educate and train Australian local government and emergency service managers in the area of emergency/ disaster management planning. In 1999 the undergraduate program was enhanced through the development of a post-graduate Master's degree, at the time, the first of its type in the world.

OBJECTIVES

The goal of the undergraduate program is to provide students with the skills, knowledge and capability to enhance the emergency/ disaster management strategies within their respective communities. The program does this by enabling students to practically apply recognized best practice emergency/ disaster risk management concepts, principles and practices within a chosen community setting. Assessment in the program being related to this application of the skills, knowledge and practices and the outcomes obtained.

The goal of the post-graduate program follows is to enable students to enhance a selected area of emergency/ disaster management and risk management practice through the undertaking of a focused period of study and research relevant to those areas of emergency and risk management. This is achieved through the conduct of a series of work based emergency management and risk management projects.

ACTIVITIES

Within the undergraduate program, students undertake a series of emergency/ disaster risk management activities within the areas of emergency management planning, emergency operations management and emergency recovery management Within the planning component, students conduct a hazard analysis/ risk assessment, develop an emergency management plan and develop Standard Operating Procedures (SOPs), a Training Needs Analysis (TNA) and an exercise to compliment their emergency management plan. In the operations management component, students analyze the management of a previous emergency/ disaster event during its pre-impact, impact and post-impact phases in order to identify enhancements that can be made to the management of future emergency/ disaster events. Finally in the emergency recovery management component the students conduct a comprehensive community analysis, identifying a selected community's emergency recovery needs, capabilities and shortfalls, culminating in the development of a set of recovery management strategies for that specific community.

Within the post-graduate program, students undertake two projects of their own determination, focused on an area of emergency/ disaster management and an area of risk management. The results of these projects being the development of a series of publishable papers and training/ educational portfolios which will enhance those areas of emergency/ disaster and risk management practices.

ACHIEVEMENTS

In the 15 years that the undergraduate program has been running, students have undertaken literally hundreds of hazard analyses/ risk assessments and have developed associated emergency management plans, SOPs, TNAs, exercises and community recovery plans. These

activities have enhanced the emergency management arrangements within a wide and diverse range of communities including emergency service agencies, local residential communities, essential services/ utilities, schools, private industry and commercial businesses. In addition to the planning activities, students have analyzed hundreds of emergency events, identifying strengths and weaknesses in the management of those events and making recommendations as to how the management of future similar events might be enhanced

In the five years that the post-graduate program has been running, students from all around the world have undertaken projects to enhance their chosen fields of emergency and risk management. As a result of these projects, we have seen the development of emergency response policies and strategies within the Saudi oil industry, the enhancement of community involvement in management, the enhancement of risk management practices in tertiary education institutions, the development of emergency management education initiatives for Hong Kong and the development of flood mitigation initiatives in Vietnam, to name but a few.

LESSONS

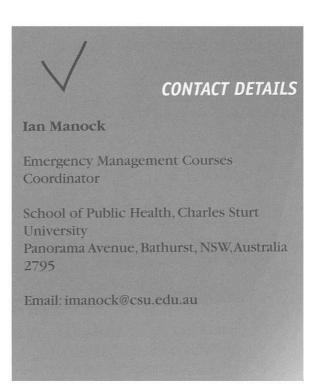
The programs have proven the benefits of mixing the learning of theoretical concepts and principles with practical application and practice based educational activities. The use of work-based projects to support the theoretical concepts and principles enables students to not only complete an academic requirement but also to enhance an actual area of emergency/disaster management practice.

As with all forms of distance education, the major challenge is enabling students to obtain the personal academic support and collegiate contact with other students and staff that will enable them to make the most of their educational experience whilst based at home. The use of online/ internet-based support facilities compliments this learning In addition, maintaining a program that incorporates concepts and principles that can be adapted for application within a variety of national and international contexts is an ongoing challenge.

FUTURE

Future actions will include:

- ■Incorporation of enhanced risk assessment processes, concepts and principles within the programs that will enable students to expand their scope of risk management activities to include critical infrastructure, sustainability of emergency risk management practices and identification and implementation of improved preventative and mitigation strategies, and
- Increased linkage between the educational/ academic aspects of the programs and external research programs related to emergency/ disaster management sustainability, risk reduction and human security and public safety.



84 Improving Community Sustainability Through Distance Learning

BACKGROUND

In the late 1980s The Tasmanian State Emergency Service developed a training program for local government and emergency service agencies that was aimed at providing the skills and techniques for developing effective emergency/ disaster management plans at local levels.

This program was enhanced in the early 1990s with the addition of operations management and recovery management components. These enabled the students to practically apply the knowledge, skills and techniques pertinent to those specific areas of emergency/ disaster management in a practical manner. This training program was then formalized during the mid 1990s into a tertiary level education course undertaken completely by distance learning or correspondence offered through Charles Sturt University in Australia. The result of this study is the acquisition of an undergraduate degree in Social Science, majoring in Emergency Management.

OBJECTIVES

The goal of the educational program is twofold. Firstly to enhance and improve the emergency management practices, knowledge and skills of personnel involved in the area of emergency/disaster management and its allied fields, and secondly to enhance the emergency/ disaster management strategies and sustainability within local communities

To achieve these goals, the program provides students with an opportunity to practically apply the knowledge, skills, practices and techniques within communities of their choice. The end result being the actual undertaking of an emergency/ disaster management planning project within a community; the critical analysis of the management of a major emergency/disaster event, and finally the analysis of a community's recovery management needs and capabilities and development of a community recovery strategy.

ACTIVITIES

Those undertaking the study complete the following practical activities over a period of four years:

- ■Conduct a hazard analysis/ risk assessment within a selected community and from that develop strategies to treat those risks including development or emergency response plans, development of standard operating procedures (SOPs), conduct of training needs analyses (TNA) based on the SOPs and finally development of an exercise to test the plans and procedures (18 months)
- Critically analyze an emergency/ disaster event through its pre-impact, impact and post impact phases, identifying strengths and weaknesses in aspects of its management, draw conclusions from that analysis and make recommendations that will enhance the management of future similar events (18 months); and
- ■Analyze a selected community and identify and describe the emergency/ disaster recovery needs and capabilities of that community. From this analysis, develop a set of emergency/ disaster recovery strategies for that community that will enable that community to more effectively recover following the impact of an emergency event (12 months).

ACHIEVEMENTS

In the 15 years that the program has been running, students have undertaken literally hundreds of hazard analyses/ risk assessments and have developed associated emergency management plans, SOPs. TNAs, exercises and community recovery plans These activities have enhanced the emergency management arrangements within a wide and diverse range of communities including emergency service agencies, local residential communities, essential services/ utilities, schools, private industry and commercial businesses. In addition to the planning activities, students have analyzed hundreds of emergency events, identifying

strengths and weaknesses in the management of those events and making recommendations as to how the management of future similar events might be enhanced

As a result of these practical based learning activities, students have enabled small communities (be they work based communities, residential communities or social communities) to improve their emergency/ disaster management capabilities and strategies and enhance their overall sustainability through the improved management of risks. A majority of these projects would not have occurred had it not been as a result of the study being undertaken and the dedication and diligence of the students in applying the theoretical frameworks within a real context

LESSONS

The program has proven the benefits of mixing the learning of theoretical concepts and principles with practical application and practice based educational activities. The use of work based projects to support the theoretical concepts and principles enables students to not only complete an academic requirement but also to enhance an actual area of emergency/disaster management practice and to improve the sustainability of small communities within the emergency management context.

As with all forms of distance education, the major challenge is enabling students to obtain the personal academic support and collegiate contact with other students and staff that will enable them to make the most of their educational experience whilst based at home. The use of online/ internet based support facilities compliments this learning. In addition, maintaining a program that incorporates concepts and principles that can be adapted for application within a variety of national and international contexts is an ongoing challenge. Finally, the requirement for students to establish real life networks within actual communities and undertake their practical applications in real life, enables them to not only grasp more effectively the concepts and principles of emergency management, but to appreciate their application in a real life environment.

FUTURE

Future actions will include:

- ■The incorporation of enhanced risk assessment processes, concepts and principles within the program that will enable students to expand their scope of risk management activities to include critical infrastructure, sustainability of emergency risk management practices and identification and implementation of improved preventative and mitigation strategies, and
- ■Increased linkage between the educational/ academic aspects of the programs and external research programs related to emergency/ disaster management sustainability, risk reduction and human security and public safety.

