

APMLA Program for IAFS Tuesday 22 August

Time	Topic: Training for catastrophes	Presenter
9.00	Introduction: Overview of cooperative efforts in disaster response in the Asia Pacific Region	Dr Mohd Shah Mahmood , Chair APMLA; Director National Institute of Forensic Medicine, Malaysia.
	Forensic management of migration –related deaths	
9.15	Thailand: Challenges of Identifying the deceased in cross border migrations	Dr Triyarith Temahivong Deputy Director Central Institute of Forensic Science, Bangkok, Thailand Dr Panjai Woharndee Senior Forensic Pathologist Dr Panjai Woharndee Senior Forensic Pathologist Director of the Forensic Science Promotion and Development Division CIFS
9.45	Malaysia: DVI for clandestine graves of more than 100 cross border migrants.	Dr Mohd Shah Mahmood , Director National Institute of Forensic Medicine, Malaysia. Chair APMLA
10.15	Break	
10.30	Management of Fragmentary Human Remains in Mass Disasters and Catastrophes: Launch of new APMLA Guide	Professor Stephen Cordner , Professor of Forensic medicine (International) , Monash University Head International Program Victorian Institute of Forensic Medicine
10.45	Temporary Mortuary Set Up and Work Flow for Mass Disasters	Dr Jodie Leditschke Manager Forensic Technical Services Victorian Institute of Forensic Medicine
	Disaster Response Case Studies	
11.15	Japan: Dead Body Management: the 2011 Japanese earthquake and tsunami killed almost 16,000 people.	Professor Morio Iino Head Division of Legal Medicine Tottori University Japan
11.45	Indonesian and Korean cooperation: Identification of deceased crew in South Korean fishing vessel in the Bering Sea in 2014 and 2014 Air Asia Flight QZ8501 plane crash in Indonesia. Korean and Philippines cooperation: Kidnap and murder of Korean tourists in the Philippines by a Korean national.	Dr Nak-Eun Chung Medical Examiner and Director Korea DVI, Republic of Korea National Forensic Service.
12.15	Lunch break	
1.30pm	Training for catastrophes: Preparing ASEANAPOL police to be first responders.	Dr Liz Manning Manager VIFM International Program
1.45 - 3pm	Scenario-based demonstration of MIM Mass ID software developed by Korea DVI.	Dr Nak-Eun Chung: Chief Medical Examiner and Director Korea DVI, Dr Byung-Ha Choi: Medical Examiner Republic of Korea National Forensic Service

Japan:
Dead Body Management:
the 2011 Japanese earthquake and tsunami killed almost 16,000 people.

Prof. Morio Iino

Division of Legal Medicine, Tottori University School of Medicine
Deputy Chair of APMLA (Asia Pacific Medico-Legal Agencies)

On 11th March 2011, the world 4th largest earthquake (9.0 M) hit Tohoku, the north east coast area of Japan. The quake generated tsunami which crashed ashore. The first tsunami of 15 meters high reached ashore 40 minutes after the quake. We lost approximately 16,000 people and more than 2,000 are missing.

National Police Agency (NPA) took command of DVI (disaster victim identification). Police, Self Defense Force, fire rescue units and local government personnel organized the teams to recover the bodies from the sites. Japanese Society of Legal Medicine (JSLM) kept sending member forensic pathologists and odontologists to the sites for 4 months till July, 2011.

The DVI sites were made in the public buildings i.e. schools or public halls. A DVI team consisted of a forensic pathologist, two forensic odontologists, an inspector, a photographer and some assistants from the police. First the police inspector checks the personal belongings and does the inspection of the body. Secondary the pathologist does the external examination and collects blood/toenail samples for DNA testing. Then a pair of the odontologists makes a dental chart. Not many dental X-rays were taken because of electricity failure after the tsunami.

More than 90% of the victims were estimated as drowning from tsunami for cause of death. Most of the victims were visually identified. Others are identified by dental records, fingerprints, directory referencing DNA, or kinship analyses of DNA.

Since many dental clinics which had antemortem images of the missing people were swept by the tsunami, we had difficulties in identifying victims from dental records. There were some cases of misidentification resulted from visual identification.

No CT image has been taken for DVI through the operation. Possible reasons for this are 1) there were too many bodies to scan; time/cost-consuming 2) DVI was operated at many sites in the broad area, 3) we did not have enough knowledge to apply imaging techniques for DVI, and 4) most bodies were not injured or decomposed to be visually identified easily because of the disaster type (tsunami) in winter.

Six years have passed after the tsunami, 15,824/ 15,893 (99.6%) bodies have been identified and 2,554 are still missing.