



### D24 Thailand Disaster-Tsunami 2004 (An International Response)

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The goal of this presentation is to review the events surrounding the tsunami of 2004 in Thailand with respect to how information was collected and processed in the International Information Management Center in order to determine positive identification.

This presentation will impact the forensic community and/or humanity by assisting the forensic science community in understanding the forensic and identification challenges faced in a natural disaster on an international scale. Although the methodology of how identifications are made has not changed, the advancement in technology has streamlined the process and the scope of developing, managing, and operating an Information Management Center is as critical as managing and operating a temporary morgue.

On the morning of 26 December 2004, a series of large waves between 50-100 feet tall struck southern Asia following an earthquake in the middle of the Indian Ocean. One of the hardest hit areas was the southern peninsula of Thailand. The island of Phuket which caters to a large number of visitors from Australia and Europe saw the largest number of fatalities among foreign tourists. Over 5000 foreign tourists were killed as a result of the tsunami which brought together one of the largest international responses for victim recovery and identifications in recent times.

Forty-two countries lost citizens as a result of this tragedy. Therefore, the scope of recovering and identifying human remains was greater than any forensic professional could imagine. The response by international Disaster Victim Identification (DVI) teams, private companies, and foreign countries was more than anyone could expect. The incredibly high human cost was far beyond the expectation and expertise of the Thai authorities, who had never experienced a disaster of such magnitude and had not prepared a systematic management plan.

With any disaster, there are always challenges in the recovery, identification, and return of human remains back to families. Some of these encountered were the result of the remote location of the disaster, the lack of resources in the area, weather conditions, and cultural differences due to the involvement of so many different nationalities. However, the ultimate challenge was the ability to coordinate and process antemortem and postmortem records in order to determine positive identification.

Victim identification is critical in any mass fatality incident. During the tsunami disaster, a global Information Management Center (IMC) was created that became the nerve center and repository for both antemortem and postmortem records. Within the IMC, methods were developed to handle the large number of records and information that was being filtered into the system on a daily basis. During its peak operations, there were different DVI teams from 17 countries working in the IMC. In addition, personnel trained in reconciliation were called upon to provide their expertise using various identification software programs.

With recent advancements in computer, fingerprint, and DNA technology, investigators have the tools and techniques necessary to determine positive identification on more victims of mass fatality incidents. Though the days of comparing radiographs by hand still exist, modern technology has brought this process to another level. The scope of developing, managing and operating an Information Management Center is as critical as managing and operating the morgue in a mass disaster.

#### **Mass Disaster, Mass Fatality Incident, Identification**