



### D17 Death and Diplomacy: Multinational Forensic Responses to Mass Fatality Incidents

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Attendees will learn of the South Asian Tsunami disaster, a tragic event that brought to light some serious deficiencies in the realm of multinational forensic responses to mass fatality events. Some of these deficiencies as seen from the perspective of forensic scientists working at the mortuaries and information/data management centers in Thailand will be discussed. The reader will be made aware of some of the major process and coordination related issues still facing multinational forensic response teams.

This presentation will impact the forensic community and/or humanity by discussing major process and coordination related issues still facing multinational forensic response teams. It is anticipated that this poster will generate discussion among forensic professionals to help better prepare for the next mass fatality incident that involves decedents from different cultures and nations.

While the mission of the Joint POW/MIA Accounting Command (JPAC) is to search for, recover, and identify missing U.S. service personnel from past wars, JPAC is also tasked to undertake humanitarian missions. On 27 December 2004, JPAC was ordered to assist in the forensic response to the effects of the South Asian Tsunami. This poster presents some of the fundamental difficulties to overcome when large numbers of international Disaster Victim Identification (DVI) response teams work together. It illustrates these problems with reference to a case study where a body was lost at least three times, and an overview of the protocols utilized/enacted by the international community and local Thai authorities.

The current standard for the international DVI community (and that ultimately used post-Tsunami in Thailand) is the INTERPOL Protocol. Since, in its current incarnation, DVI is largely a police process; the INTERPOL Protocol reflects this bias. The protocols maintain an implicit assumption that scientific methods are the standards by which identifications are made. However, there is an explicit lack of scientific methodology that explains how to resolve the complex problems that arise when attempting to identify unknowns from large scale, open ended populations.

As of 5 April 2005 over 174,000 individuals were presumed dead as a result of the 26 December 2004 South Asian Tsunami (CDC 2005). The confirmed dead in Thailand (CDC 2005) numbered 5,395. Approximately 50% of the dead in Thailand were non-Thai (CDC 2005). The Thai local authorities responded by collecting bodies and using local identification protocols and chain of custody procedures. They began storing bodies at temporary mortuaries and using a combination of the limited number of available refrigeration facilities, dry ice, and mass burials to try and decelerate the decomposition process. Initially four temporary morgues were established at converted temples (Wats). The Thai Royal Police has jurisdiction over the identification process in Thailand, but other Thai ministries are involved.

The Thai Government generously encouraged other nations to send forensic assistance. Approximately 30 countries sent DVI teams, or their equivalent, to Thailand, totaling over 600 personnel. A large multinational group (the Thai Tsunami Victim Identification Committee – TTVI) was eventually formed to oversee the identification process because of an urgent need to standardize operations, and thus the INTERPOL DVI protocols were implemented.

An estimated 700 bodies were “identified” and released prior to the establishment of the international DVI process. Since then, 4,082 postmortem and 2,164 ante-mortem data files have been created. From these data files, 1,112 bodies have been identified, including 1,046 identified on the basis of one type of data (962 dental, 71 fingerprints, ten physical, and only three DNA). Sixty-six others have been identified by combinations of data types.

More than 95% of identifications have been of persons aged >17 years. It is uncertain why there has been a failure to identify children successfully in Thailand, as children have been readily identifiable from previous mass fatalities (Sledzik and Kontanis 2005; Warren *et al.* 1999) and nearly 50% of the deceased were from first world nations where there is presumably wide availability of dental and other antemortem records.

This poster concludes by stressing the overwhelming need for an international coordination body with responsibility for DVI. This body's first priority must be a critical review of the INTERPOL DVI system. Identification and repatriation is essential for the post-traumatic resolution of communities. Humanitarian assistance does not stop with the living.

#### **South Asian Tsunami, Mass Fatality Incidents, Disaster Victim Identification**