

## F19 Problem Solving in Response to the World's Worst Disaster: The Canadian Perspective

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The goals of this presentation are to present to the forensic and dental communities and overview of the Canadian dental response to the Thailand tsunami victim identification effort and to illustrate the use of the internet to transmit identification data to remote locations for use in DVI efforts.

This presentation will impact the forensic community by providing a large impact by providing insights into new problems that arose after the Thailand tsunami and the solutions that were developed to solve these problems.

The devastating Indian Ocean earthquake in late 2004 and the subsequent tsunami that was spawned by the changes on the ocean floor caused changes to the planet and mankind that could never be predicted. The Earth was physically altered forever; an unprecedented outpouring of support from all corners of the planet occurred; a staggering number of victims were lost; and the way that forensic disciplines reacted to the need to identify the deceased was extraordinary.

The west coast of Thailand was one of the worst affected tourist resort areas. A large team of international experts was deployed to Thailand over a long period of time to search for, identify and repatriate the victims' bodies. Forensic dentistry played the most significant role of all the responding identification disciplines. In the first five months, over 90% of the found bodies were identified using dental records. Subsequently, as other methods were needed due to a lack of available dental data, forensic dental methods continued to play a strong supporting role to mediate probable identifications, narrow populations for targeted searches and confirm putative identifications concluded from other evidence.

Although each team of dentists worked as part of an international effort, individual countries sponsored their own teams. Canada's efforts to identify its own victims and to assist as a member of the international victim identification effort extended over a 8-month period. The effort involved on-site personnel (15 dentists, 5 fingerprint experts, 14 Royal Canadian Mounted Police officers, including anthropologists, forensic identification specialists and experts in DVI logistics, communications and security) and laboratory-based personnel (DNA analysts and allied dental personnel).

An overview of this international effort along with the intricacies and complexities of the response from the Canadian perspective are presented in this paper. This includes the problems associated with remote transmission of dental records to a disaster site, solutions that were developed to solve logistical problems with dental, medical, fingerprint and personal records, and a summary of the evolution of the disaster response efforts. Special emphasis will be given to the use of the internet in the transmission of identification data and the use of computer technology to solve various issues that occurred during the response.

## Disaster Victim Identification, Internet Data Transmission, Mass Disaster Response