

## Program Development

# Victim Identification and Family Support in Mass Casualties: The Massachusetts Model

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**ABSTRACT:** *The Aviation Disaster Family Assistance Act of 1996 requires the National Transportation Safety Board (NTSB), air carriers, and the American Red Cross (ARC) to provide an integrated family assistance center to offer support to family survivors of mass casualties. A central component of post-incident response is the timely identification of victims and their personal belongings. This identification process occurs through antemortem interviews with family survivors. ARC of Massachusetts Bay determined that ARC volunteers would not play a major role in conducting antemortem interviews, and deferred primary responsibility for this task to the Massachusetts Office of the Chief Medical Examiner (OCMB). This paper presents the Massachusetts model for victim identification and family support at the local level. The structure and services of this model for on-site forensic processing, the fielding of antemortem interviewers, and a comprehensive training curriculum in psychological trauma and victim identification are presented. The implications are discussed. [International Journal of Emergency Mental Health, 1999, 1(4), 237-242]*

**KEYWORDS:** crisis intervention; family support; mass disasters; medical examiner; psychological trauma; victim identification

*The Aviation Disaster Family Assistance Act of 1996* (US Congress, 1996) mandated that various family supports located within an integrated family assistance center be made available to family survivors in the event of an aviation disaster. The National Transportation Safety Board (NTSB) was given oversight responsibility for the provision of services to the family assistance center. The NTSB is further required to coordinate mental health services provided by the American Red Cross (ARC) disaster response teams, including securing an accurate passenger manifest; using the air carrier's resources for ARC needs; prohibiting attorney solicitations until thirty days after the incident; providing regular incident debriefings; and arranging for a suitable memorial.

Air carriers are required to provide the actual family assistance center itself and to work with the ARC to provide family support services, including notifying families on an individual basis, providing updated information to families

first, consulting with families on the disposition of the remains of loved ones, arranging for the return of personal property, and assisting in the construction of a memorial for the victims. ARC is to develop specific policies and services for the family assistance center (American Red Cross, 1997) and to work with local governments to assess response capability and to coordinate services for emergency services, mental health support, and victim identification. ARC will also be responsible for alert notification, initial response, disaster health and mental health services, volunteers, the media, and providing the family with food, clothing, shelter, and medical attention. ARC will develop the necessary policies and procedures to shield family survivors, provide confidentiality and provide general administrative overview in these matters.

A central component of family assistance center services is the timely and accurate identification of victims and their personal belongings so that the remains of loved ones and

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<sup>1</sup> The antemortem interview is the collection of medical-based information (such as history of medical procedures, dental information, scars, and other defining characteristics) from the family and/or primary care physician(s). This information is then used to positively identify the human remains.

their property can be released to their families, and the families' suffering can be mitigated. This process requires the establishment of a working forensic processing center, the gathering of remains and personal property, and conducting antemortem interviews<sup>1</sup> with families to ensure proper identification. ARC of Massachusetts Bay determined that ARC volunteers would not play a major role in conducting antemortem interviews, and deferred primary responsibility for this task to the Medical Examiner's office.

The purpose of this paper is to outline a local model for victim identification and family support within the larger family assistance center project. This model was developed by the Massachusetts Office of the Chief Medical Examiner (OCME) within the basic initiative fielded by the Massachusetts Port Authority (Massport), the state agency which is responsible for Logan International Airport in Boston, Massachusetts. The model includes the process of forensic identification, the fielding of the antemortem interviewers, and the training of these interviewers in the domains of both psychological trauma/crisis intervention and victim identification procedures.

### **Victim Identification and Family Support: The Massachusetts Model**

#### *Office of the Chief Medical Examiner*

In the event of a mass fatality incident, the OCME (Evans, 1995, 1998) needs to coordinate victim identification at three sites: OCME headquarters, the onsite incident scene, and the integrated family assistance center. Onsite, the OCME would recover and prepare the remains at the forensic processing center. This identification and recovery process would be enhanced by antemortem interviews with family survivors at the family assistance center. When the processing is completed, the human remains are transported to OCME headquarters where the manner and cause of death are determined, and the remains are then released to the family. OCME works closely with NTSB, ARC, the air carrier, the Federal Aviation Administration (FAA), Massport, and other interested parties, and serves as part of the incident command staff to ensure that it attains its assigned mission.

To complete its mission, OCME is responsible for case intake, antemortem interviews with family survivors, interviewer debriefings as needed, death notification, case management, and case release. In this process, it is important that OCME headquarters, the onsite processing center and

the family assistance center work closely together. OCME uses various computerized information technology tools to facilitate the identification process. Identifying information entered at one site is immediately available at the other two.

The antemortem interview (OCME, 1999) in this process consists of an in-depth interview with the family survivors for all identifying information that will assist in the accurate identification of loved ones. Included in this review are basic demographic information, personal body identification markers, dental records, and similar types of possible identifying information. This interview is conducted by specially trained antemortem interviewers who work in teams of two. One interviewer questions the family survivors, and one records the necessary information. The family is escorted to that part of the family assistance center that is allotted for victim identification interviews by the ARC crisis counselor assigned to the family. In addition to human remains identification, the antemortem interviewers have also been trained in the principles of psychological trauma and crisis intervention so that they may assist and support family members during the interview. Antemortem interviews may take one or two hours to complete and may need to be repeated. The antemortem team becomes the case management team for the family for any aspect of victim identification. When the interview(s) are completed, the ARC crisis counselor returns the family to the larger family assistance center activities and continues to provide emotional support to that family.

The OCME intervention process is led by a director of intervention services, individual intervention team leaders, and individual intervention teams. All intervention specialists including the antemortem interviewers are afforded liability protection in accordance with protections offered as a component of a (governmental) organization designated to respond to a disaster.

OCME approached the state's disaster services agencies for guidance in the selection and training of qualified persons to conduct antemortem interviews. These groups suggested that all candidates be licensed, have an awareness of physical bodily structures and functions, and that they be trained in both the principles of psychological trauma and crisis intervention and in antemortem interviewing. The agencies then assisted in the development of the curriculum and the statewide recruitment and training of over two hundred individuals. It was decided that any individual mobilized for antemortem interviewing would be deleted from other active

service roster lists for the duration of the incident. Antemortem interviewers are debriefed at various times during the critical incident by members of the other disaster services intervention agencies.

These OCME victim identification and family support interventions have been designed for Logan International Airport. Since Logan field is an international airport, there are a significant number of flights with non-English speaking passengers. The disaster services agencies have identified a list of resources for obtaining translation services and cultural and belief-appropriate services. These resources are available to the family assistance center and the antemortem interviewers in the victim identification component.

### **Training in Psychological Trauma and Victim Identification**

The antemortem counselors were trained in the principles of psychological trauma and crisis intervention procedures as well as in the medical process of victim identification through body parts and identifying markers. *Psychological Trauma/Crisis Intervention*

The psychological component of the training included a review of the principles of psychological trauma and posttraumatic stress disorder (PTSD; American Psychiatric Association, 1994; Everly & Lating, 1995; Flannery, 1999a, 1999b; van der Kolk, McFarlane, & Weisaeth, 1996), the stages of crisis for family survivors (Flannery, 2000), and crisis intervention principles (Everly & Mitchell, 1999; Mitchell & Everly, 1996; Everly, Flannery, & Mitchell, 1999; Flannery, 1998, 1999b).

The review of psychological trauma begins by defining critical incidents and the acute stress disorder and/or PTSD that often accompanies these traumatic events (American Psychiatric Association, 1994; Flannery, 1994). Attention is drawn to disruptions in reasonable mastery, the ability to shape the environment to meet our needs; in caring attachments to others, the support network of persons who provide companionship, information and support; and in a meaningful purpose in life, that aspect or value in life that provides persons with a reason to become involved with the world each day. Reasonable mastery, caring attachments, and a meaningful purpose are the domains associated with good physical and mental health and are themselves often disrupted in traumatic

events (Everly & Lating, 1995; Flannery, 1994, 1999a). In addition to disruptions in these three domains, the training also outlines the symptoms commonly associated with the body's emergency mobilization system during critical incidents: physical symptoms (e.g., hypervigilance, sleep disturbances, exaggerated startle response), intrusive symptoms associated with recollecting the event (e.g., dreams, nightmares, flashbacks), and avoidant symptoms which reflect the victim's desire to withdraw from daily activity (e.g., avoiding the site of the critical incident, gradual withdrawal from other nontraumatic daily events, and a numbing of feelings) (American Psychiatric Association, 1994; Flannery, 1994, 1999a).

The training continues with an overview of the three stages family survivors may encounter in critical incidents (Flannery, 2000). The first stage is *ambiguity*. Individuals rely on constant information from the environment to alert them as to how to respond to successive daily events. When the environment is not providing this information, individuals become frustrated, anxious, irritable, angry, and/or overwhelmed. In the early hours after an aviation disaster, families usually encounter great ambiguity from the environment. The extent of loss of life and property is usually unknown. Additionally, the landscape of the many governmental and/or non-profit organizations (NTSB, ARC, OCME) with incident-related status information are often unclear to families. Family survivors may become frustrated, anxious, and angry. As the extent of loss becomes clear, family survivors encounter the second stage, that of *depression*. The impact of the loss of loved ones and personal property usually leads to grief and feelings of anger, sadness, loneliness and depression as survivors begin to grieve the loss as an initial step in adapting to life in the absence of the lost loved one or lost personal property. If families are not provided with adequate support during the first two stages, they may encounter the third stage of *PTSD* with disruptions in functioning that will last until death in the absence of treatment (Flannery, 1999a). Trainees are taught specific strategies to monitor the symptoms of trauma in each stage and to restore mastery, attachment, and meaning as the demands on the family survivor unit evolve (Flannery, 2000).

The third component of the psychological trauma training is a review of crisis intervention procedures (Everly & Mitchell, 1999; Mitchell & Everly, 1996; Everly, Flannery, & Mitchell, 1999; Flannery, 1998, 1999b). Trainees learn of Critical Incident Stress Management

(CISM) approaches (Everly & Mitchell, 1999). CISM emphasizes pre-incident through acute care to post-incident interventions that mitigate acute stress disorder and mitigate and prevent the onset of PTSD (American Psychiatric Association, 1994). Trainees are familiarized with the basic components of crisis intervention, including immediate response; the gathering of facts; fostering ventilation; monitoring symptoms; and restoring mastery, attachment, and meaning (Everly & Mitchell, 1999; Flannery, 2000; Sandoval, 1985). Trainees then study the Assaulted Staff Action Program (ASAP; Flannery, 1998) as a CISM approach (Everly & Mitchell, 1999). Designed originally for service providers in health care settings who were assaulted by patients, ASAP provides a series of crisis interventions that can be adapted for the specific needs of family survivors during and after the critical incident. Included in ASAP services are individual crisis interventions, group crisis interventions (Mitchell & Everly, 1996), extended family outreach, and private referrals where indicated. Examples of different situations of need are illustrated and role-played when additional hands-on experience is sought.

### *Victim Identification*

The OCME (Massachusetts Office of the Chief Medical Examiner, 1999) has designed a rigorous training component that begins with a review of the recovery, intake, identification, postmortem, and release of the remains and issuance of death certificate. This is supplemented with an outline of the principles of human remains identification that reviews physical characteristics; causes of death; and dental, anthropological, fingerprint, and DNA identification. The antemortem interview content, the necessary forms for documentation, and commonly encountered problems in interviewing family survivors are reviewed.

The goal of both the psychological and victim identification training components is to train antemortem counselors who are sensitive to the changing needs of the traumatized family survivors that they are interviewing and who are technically skilled so that bodies of victims can be identified as quickly as possible so that the suffering of family survivors will be mitigated as quickly as possible.

The training materials for the psychological component are published in full (Everly & Mitchell, 1999; Flannery, 1994, 1998, 1999a, 1999b, 2000; Mitchell & Everly, 1996), and the materials for victim identification are in the public domain and may be obtained from the OCME (1999).

## **Discussion**

This paper has outlined a coordinated, well-designed, highly trained response to the need for victim identification and family support as one central component of an integrated family assistance center. The model is responsive to the ARC request for local resolution of victim identification and responsive to the various needs and mandates of the FAA, NTSB, and specific air carriers in addressing the aftermath of a critical incident. The clarity of the basic structure of the model, the specific criteria for selection of antemortem interviewers, and the full availability of the training curriculum permit this approach to be easily replicated or modified as needed by other state medical examiners or specific air carriers responsible for fielding a family assistance center in the aftermath of an aviation disaster where timely victim identification is indicated.

Representatives of the various agencies that would be responsible for responding to the critical incident in Massachusetts met on a regular basis and addressed three issues that enhanced the development of the final model. These included developing an awareness of, and the process for, facilitating each agency's ability to meet its mission mandate, the creative use of existing information technology, and the selection and training of a roster of pre-disaster trained professional counselors.

*Interagency Interface.* The full understanding of the mission of each public, private, and non-profit organization mandated to respond is necessary for a successful response to the critical incident. Organizational confusion, working at cross-purposes, and mutually contradictory initiatives impair an adequate response and may result in additional loss of life and property. The agencies responsible for planning the implementation of an integrated family assistance center held regular meetings to examine in the potential mission and roles required of each agency. This process enhanced the ability of the agencies to think through the overall mission, to avoid duplication of services, to permit specific jobs to be identified and addressed, and to foster a spirit of interagency cooperation. In Massachusetts, these interagency efforts for establishing an integrated family assistance center appeared to be best undertaken within the existing statewide emergency management effort that includes responsibility for the disaster mental health component. This format provided each agency with legitimacy for its interagency developmental efforts.

*Technology.* The creative use of existing information technology was a second important development that emerged. In previous incidents, the medical examiner's office utilized a single, stand-alone information system on-site. The antemortem interviewing of families within the family assistance center suggested that information provided by families and made immediately available to the on-site forensic processing center and the medical examiner's headquarters would hasten the identification process and mitigate the suffering of the family survivors. A computer software package that provided needed information to all three medical examiner sites simultaneously was identified and integrated into the model.

*Crisis Counselors.* A third issue that was addressed by the interagency group was the selection and training of all onsite counselors. Disasters with a significant loss of life often receive high visibility media coverage that results in volunteers from the surrounding area appearing on-site and offering emotional support to victims and survivors. The responding organizations can quickly become overwhelmed with well-intentioned volunteers and these organizations must have the capacity to screen volunteers against their rosters of trained staff, confirm their credentials, assign duties as appropriate, or turn them away at the door. The group felt that it was imperative that services provided to family survivors be provided by pre-disaster trained professional staff and antemortem interviewers. Screening, training, and

service delivery assignment procedures were reviewed thoroughly and coordinated so that quality care and support to family survivors would be ensured.

The development of the Massachusetts model for victim identification and family support led the interagency group to appreciate how the integrated family assistance center might itself evolve as a management tool for directing the operations and support services for family survivors. The enabling legislation is silent on matters such as the presence of televisions in the assistance center, whether there should be communal meals, and the like. Informal queries of family survivors about their needs, past experiences of family survivors, and an awareness of the psychological issues encountered by family survivors should in time enhance the capacity of family assistance center staff to develop procedures that provide support and comfort to family survivors at a vulnerable moment in their lives. Research in these and similar matters is urgently needed.

Finally, it would appear that the model outlined here for an aviation disaster should be readily transferable to other types of natural disasters and similar critical incidents where victim identification is required and family assistance centers would be of help. The collaborative process initiated here fosters informal as well as formal relationships that minimize turf issues and enhances cooperative efforts in the face of many types of common and serious missions.

## References

- American Psychiatric Association (1994). *Diagnostic and statistical manual of mental disorders* (4<sup>th</sup> ed.). Washington, DC: American Psychiatric Association.
- American Red Cross (1997). *Plan for implementation of the federal family assistance act for aviation disasters*. Washington, DC: American Red Cross.
- Evans, R. (1995). *Commonwealth of Massachusetts Office of the Chief Medical Examiner policy and procedure manual*. Boston: Office of the Chief Medical Examiner.
- Evans, R. (1998). *Commonwealth of Massachusetts Office of the Chief Medical Examiner mass fatality and mitigation plan*. Boston: Office of the Chief Medical Examiner.
- Everly, G.S., Jr. & Mitchell, J.T. (1999). *Critical Incident Stress Management (CISM): A new era and standard of care in crisis intervention* (2<sup>nd</sup> ed.). Ellicott City, MD: Chevron.
- Everly, G.S., Jr., Flannery, R.B., Jr., & Mitchell, J.T. (1999). Critical Incident Stress Management (CISM): A review of the literature. *Aggression and Violent Behavior: A Review Journal*, 5, 23-40.
- Flannery, R.B., Jr. (1994). *Posttraumatic Stress Disorder: The victim's guide to healing and recovery*. New York: Crossroad.
- Flannery, R.B., Jr. (1998). *The Assaulted Staff Action Program (ASAP): Coping with the psychological aftermath of violence*. Ellicott City, MD: Chevron.
- Flannery, R.B., Jr. (1999a). Psychological trauma and Posttraumatic Stress Disorder: A review. *International Journal of Emergency Mental Health*, 1, 135-140.
- Flannery, R.B., Jr. (1999b). Crisis intervention: A review. *International Journal of Emergency Mental Health*, in press.
- Flannery, R.B., Jr. (2000). Treating family survivors of mass

- casualties: A CISM family crisis intervention approach. *International Journal of Emergency Mental Health*, 1, 243-250.
- G.S. Everly, Jr. & J. T. Lating (Eds.) (1995). *Psychotraumatology: Key papers and core concepts in posttraumatic stress*. New York: Plenum.
- Massachusetts Office of the Chief Medical Examiner (1999). *Victim identification and family support in mass disasters*. Boston, MA: Office of the Chief Medical Examiner.
- Mitchell, J.T. & Everly, G.S., Jr. (1996). *Critical Incident Stress Debriefing (CISD): An operations manual for the prevention of traumatic stress among emergency services and disaster workers* (2<sup>nd</sup> ed.). Ellicott City, MD: Chevron .
- Sandoval, J. (1985). Crisis counseling: Conceptualizations and general principles. *School Psychology Review*, 4, 257-265.
- United States Congress (1996). *The Aviation Disaster Family Assistance Act*. Washington, DC: US Government Printing Office.
- van der Kolk, B.A., McFarlane, A., & Weisaeth, L. (1996). *Traumatic stress: The effects of overwhelming life experience on mind, body, and society*. New York: Guilford.