



### W14 Mass Disasters and Disaster Victim Identification (DVI)

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**Learning Overview:** After attending this presentation, attendees will be able to: (1) understand the historical background of DVI, (2) recognize the need for standards and best practices, (3) understand the integrated contributions of the various forensic sciences to DVI, and (4) understand the critical relationship of the Victim Information Center to the identification process.

**Impact on the Forensic Science Community:** This presentation will impact the forensic science community by providing attendees with an understanding of the current state of mass fatality victim identification as it exists in the United States. Presentations will encompass the breadth of the forensic sciences, including ethical considerations and the role of the Victim Information Center in mass fatality identifications.

DVI is the comprehensive process of human identification as applied to mass fatality events. Although by definition a mass fatality event is any situation that overwhelms local resources, we generally think of a situation in which identification is hampered by the event and recovery process. Human remains that have been badly traumatized, heavily decomposed, or recovered outside of their normal context are examples that fit this description.

In 2014, responding to the 2009 NAS Report, the United States Department of Commerce's National Institute of Standards and Technology (NIST) established the Organization of Scientific Area Committees (OSAC) to assist the development of standards in the forensic sciences. The OSAC includes a DVI subcommittee that has promulgated recommended standards. In 2016, the American Academy of Forensic Sciences' American Standards Board (ASB) was established as a Standards Development Organization (SDO). The ASB includes a DVI Consensus Body to produce American National Standards for DVI. Using the OSAC DVI recommendations, the ASB has published several DVI standards and best practices.

While DVI may take place locally, it is by its nature a governmental process (i.e., based in the office of a coroner or medical examiner). At the United States Federal level 15, Emergency Support Functions (ESF) outline how the public and private sectors respond to national emergencies. Buried in the scope of ESF#8 is the role of the Public Health Service in disaster response, specifically mass fatality management and DVI. Here is where standards or best practices of DVI would prove highly beneficial in providing guidance to the varied agencies that may be involved in a mass fatality event.

Human identification, and by association DVI, has changed over the past century. In the not-too-distant past, visual identification was the norm. The advent of fingerprints and later odontology led to dramatic improvements in identification, especially after decomposition or traumatic injury has taken place. Today, these so-called traditional methods, along with anthropology, still dominate the field of human identification. Continued improvements in DNA technology point to the direction that the future of DVI will be taking. Time and cost are deciding factors in DVI; expedient and cost-effective methods will not be falling by the wayside any time soon.

An often neglected, but immeasurably critical, aspect of DVI is the gathering of antemortem information concerning the victims. Identification would be impossible, or nearly so, without the Victim Information Center. Interviews of family members and others acquainted with the victim's identifying features, as well as medical and dental records, are collected and compared against the biological profile of the victim's remains.

DVI therefore is the concerted and combined efforts of dedicated scientists, specialists, and governmental and private agencies. It is practiced under far less-than-perfect conditions under circumstances that are often politically and culturally charged.

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#### Identification, Disaster, Victim