



D12 Identification and Management of the West, TX Explosion Victims

Casey Anderson Gould, MA, 2355 N Stemmons Freeway, Dallas, TX 75207*

The goals of this presentation are to act as a case study of the West, TX fertilizer plant explosion and to discuss the importance of communication between agencies.

This presentation will impact the forensic science community by giving an example of multiple agencies working together to identify mass disaster victims in a unique death inquest setting. It will allow others to consider possible variations to their own mass disaster plans.

A mass disaster event is always a possibility for any medical examiner's or coroner's office and requires a combined effort by many agencies and individuals. A key factor in any large fatality incident is identifying those among the deceased in order to ascertain if there are any victims still unaccounted. This presentation will describe how the Dallas County Medical Examiner's (DCME) office and McLennan County Justice of the Peace (JP) collaborated to identify the victims of the West Fertilizer Co. ammonium nitrate plant explosion on April 17, 2013.

The West, Texas explosion caused the largest mass fatality of first responders in the country to date, since the fall of the World Trade Center towers in 2001. As a result of the death inquest structure in Texas, the McLennan County JP contracted the DCME office to identify the individuals, perform the autopsies, and other associated services. The situation was unique, for the crime scene was outside of the DCME's jurisdiction and the magnitude of the disaster was unrealized for some time due to the instability of the explosive chemicals, the lack of information about the number of people known in the area, and the number of volunteer emergency responders involved at the time of the incident. A large combined effort from law enforcement agencies, government agencies, and individuals was required to coordinate logistics and relay information.

The victims arrived at the DCME in three different intervals due to access of the blast site and search and recovery efforts. The first two victims were civilians, found in the rubble of an apartment complex near the fertilizer plant. The second wave of victims recovered from the blast site included all 11 first responders and one civilian. Lastly, another civilian from a nearby nursing home was sent two days later, after the JP learned of his injuries sustained during the blast shortly before his death. The first 14 decedents were all unidentified upon arrival to DCME. The original two civilians were noted to have relatively minor external injuries and were identified via fingerprints within four hours of their autopsy. The 12 decedent remains from the immediate blast site were noted to have various degrees of trauma among them, ranging from blunt force injuries to extreme thermal injuries. At the time of the second shipment of victims, a list of names for possible decedents was received with no other information. Within 17 hours of intake, all but two of the victims were able to be identified by fingerprints. Four days later, most of the residents of West, Texas had been located, minus a few who had been known to be in the blast radius. The recovery teams located five more human remains at this time and they were sent to DCME for identification. Dental records and DNA family reference samples for the final two unaccounted-for first responders were sent five days after the explosion. The remaining two victims and all associated human remains were identified and related within one day of their receipt, via DNA. From the initial arrival time to DCME, all decedents and associated human remains were identified within six days.

This experience demonstrated the tremendous effort and cooperation needed between agencies during a mass disaster. The identification of mass disaster victims is a challenging task in itself. Adding the aspect of relying on another agency to collect family reference data and identification materials, the need for inter-office communication and implementing a thorough but simplistic mass disaster identification system in a medical examiner's office was magnified.

Mass Disaster, Identification, West, TX