



G8 Ghost Ship Fire—Up in Smoke

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Learning Overview: After attending this presentation, attendees will understand what occurred at the Ghost Ship Fire, what was involved in body recovery, and how bodies were identified. Case examples will be examined.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by serving as a reminder to be prepared for any size disaster and by informing attendees how to manage multiple body identifications by dental means. This presentation will emphasize the need for dental identification as a means of accurate identification as well as an expedient form of identification. Many times, prior to going to the morgue in a fire case, one is concerned with the quality of the body (teeth) to be examined. Questions in this fire case were how long were the bodies exposed to the fire, did the soft tissue protect the integrity of the teeth, were teeth damaged during the recovery process, are the burned teeth going to be salvageable for evaluation and comparison, and are the antemortem records and postmortem records adequate for comparison.

Dental identification is based upon multiple points of concordance of records being compared. It may involve tooth anatomy such as clinical crown, root size, and formation. Identification also relies on tooth position and restorations placed or not placed on the tooth. There are many anatomical landmarks that may be evaluated and compared to in aiding to make a positive, negative, or inconclusive identification. In order to do a postmortem dental evaluation and identification, antemortem records must be obtained.

Three cases are presented here to review how victims were identified in this fatal fire.

Case 1: This person had alloy restorations on the buccal of the second molars. They are similar, but they can also be found on many other people. Through further investigation, indirect crowns have unique features as the dental lab and dentist will have unique preparations and designs during the fabrication process of the crowns. These allowed identification of this person more conclusively through these unique features.

Case 2: This person had tooth restorations on multiple teeth that were unique in size and shape and allowed for a conclusive determination of identification.

Case 3: In this case, as well as each case in this fire, the cause of death was smoke inhalation. The bodies were not severely burned and the teeth were well preserved. This case demonstrates the usefulness of restorations and unique dental anatomy for identification.

This catastrophic fire and cases presented will allow the forensic odontologist to appreciate the importance of attaining good antemortem records in case they need to be compared to the postmortem records. This will allow the odontologist to make a statement of identification in a timely matter.

Dental Identification, Burned Victims, Tooth Anatomy