



## Physical Anthropology Section – 2005

### H10 Lifestyles of the Unidentified: Challenges in Positive Identification

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The goal of this presentation is to illustrate skeletal features that may provide insight into an individual's lifestyle as well as aid in positive identification if antemortem records can be found.

This presentation will impact the forensic community and/or humanity by demonstrating that certain skeletal profiles can be linked to lifestyles such as homelessness. It is proposed that, despite the presence of distinguishing characteristics, many of these individuals remain unidentified due to their lifestyle.

The human skeleton exhibits many characteristics unique to an individual that can aid in positive identification. These include congenital and developmental variants as well as traits acquired during life, such as healed trauma, medical appliances, and dental restorations. The presence of rare or unique traits, however, is no guarantee of identification in cases of skeletal remains of unknown decedents. Certain lifestyles can, in fact, lead to a greater likelihood that a positive identification will not be achieved.

This poster will present skeletal profiles indicative of certain lifestyles that can impede the identification of an individual, leading to an increased probability of a case remaining unsolved. This will be illustrated by two cases of human remains recovered in 1996 and 1998 from Jefferson and St. Tammany Parishes in Louisiana. The first individual, a white male adult, is a partially skeletonized body recovered from an enclosed space in December 1998. The cause of death was determined to be compression asphyxia, due to a failed attempt to enter a building through an exhaust shaft. Skeletal features indicated an age of 30-35 years, and a height of approximately 5'8". Also present was an amalgam on the upper molar, indicating dental work had been completed at some time in the past. Another feature that could aid in identification is a healed fracture of the left maxillary bone, as well as clothing and personal items recovered at the scene. Radiographs produced good visualization of the frontal sinuses, another trait unique to an individual that can aid in identification.

The second individual, found in an outdoor setting, was completely skeletonized, with the exception of the left hand and the feet. The left hand had preserved mummified tissue, while the feet were located within intact socks. However, no other clothing was found at the scene. Skeletal features were that of a black male, age 30-40 years, and a height of approximately 5'7". Although there was extensive tooth decay at time of death, the presence of multiple amalgams and an upper denture with a single false tooth (upper left lateral incisor), indicates that dental work with potential for x-rays had been completed at some time in the past. Also present are several developmental anomalies that would also appear in radiographs, including asymmetry at the distal end of the sternum, incomplete fusion of sacral units 4 and 5, and ossification defects of the patellae. Antemortem trauma includes a healed fracture of the right ulna, and a fracture of the proximal phalanx of the left great toe, both of which may have required medical attention in the past.

Despite the fact that both skeletons showed antemortem pathologies and unusual skeletal features that could lead to a positive identification, no potential matches with missing persons were made, and the two individuals remain unidentified. In the second case, facial reconstruction was also attempted. In both of the above cases, there were also indications of certain lifestyles that could hinder identification from being reached. Both individuals showed antemortem fractures that could be indicative of a violent lifestyle. The first individual suffered from a facial fracture that could have been sustained by a blow to the face below the left eye. The second individual suffered from a possible parry fracture of the lower right arm.

Secondly, although both individuals had received professional dental care sometime in the past, at the time of death tooth decay, extensive enough to cause antemortem loss and significant discomfort was present indicating that medical care had not been sought for some time. Finally, personal effects and circumstances of discovery are also indicative of certain lifestyles. The first individual was found to have hypodermic needles within the pockets of his clothing. Although no personal effects and very little clothing were recovered for the second individual, the location of discovery was a parking area used by a traveling carnival, indicating that the individual could have lacked a permanent address. Taken as a whole, the above evidence can be used to develop a profile of individuals who, despite possessing multiple skeletal and dental traits that could aid in identification, follow a lifestyle that in effect hinders such attempts, leading to greater likelihood of a "cold case."

**Identification, Skeletal Remains, Cold Case**