



Physical Anthropology Section – 2004

H55 Personal Identification and Death Investigation of Documented and Undocumented Migrant Workers in Florida: Demographic, Biographic, and Pathologic Factors

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After attending this presentation, participants will develop a better understanding of the unique demography, migration patterns and specific anatomical characteristics of documented and undocumented laborers and farm workers.

This presentation will impact the forensic community and/or humanity by demonstrating insight in special forensic considerations for a specific population.

Estimates on the number of migrant, documented and undocumented combined, workers in the state of Florida are varied, however the *Atlas of State Profiles*, prepared by the US Department of Health and Human Services in 1994, reports that there are approximately 185,000 migrant farm workers and 253,000 seasonal farm workers for a total of 435,375. Of these, 75% are born outside the United States; two-thirds of that percentage were born in Mexico, while another one-sixth are from Central America; of those born in the US most (one-third) are from Puerto Rico. Eighty-two percent consider themselves to be Hispanic and 75% report that their native language is Spanish. The mean age of Florida farm workers is 32 years and approximately 25 percent are female. The numbers of documented versus undocumented workers also vary; however the same report notes that at least one-third of the total number of migrant workers are illegal. The leading causes of death in this population are resultant from traumatic injuries and complications related to HIV infection.

The anthropological literature on occupational markers suggests that communities involved in laborious work or repeated positional behavior experience over-use injuries of the lower limb that include the classic 'squatting facets' presenting on the talus and distal tibia, as well as evidence of lumbar and thoracic injuries. These anatomical characteristics are thus resultant from repeated mechanical loads over a period of time and have been used widely by anthropologists to denote specific behavioral patterns for populations of individuals as well as the reconstruction of life ways. The forensic anthropologist working in coordination with the medical examiner may also use such markers, and others to individuate an otherwise unknown skeleton or set of decomposed human remains.

Case histories from the C.A. Pound Human Identification Laboratory (CAPHIL) and the Medical Examiner Department, MiamiDade County involving individuals who were thought to be or identified to be part of the migrant labor community in Florida were examined for their demographic profiles, injuries, causes and manners of death. Cases from Miami-Dade are limited to that district's jurisdiction, while those from CAPHIL include individuals statewide. In addition to the traditionally noted 'squatting' and 'kneeling' facets of the lower limb and foot, marked changes are observed in the lumbar and thoracic vertebrae, as evidenced by lipping of the marginal bodies as well as the skeletal presentation of Schmorl's nodes. Upper limb joint surfaces, such as the glenoid fossa and humeral head, display arthritic change as well as additional non-specific degenerative bony changes to the hand and wrist. Further noted is evidence of untreated traumatic injuries that include displaced fractures of the upper and lower limbs (including the hand and wrist) and the mid-facial skeleton. The biological or demographic profile of these individuals follows the primary population description for migrants in that they are predominately young males (mid-twenties to early thirties) of Hispanic descent. The *manners* and *causes of death* are similar to the population as a whole.

For the personal identification of individuals thought to be migrant workers whether documented or undocumented, it is recommended that, in addition to the presentation of the classic over use injuries, one should fully examine the entire skeleton for a suite of characteristics that are suggestive of repetitive behaviors. The biological or demographic profile of the decedent is also of import. Further, information from the scene, including its relative location to fields and crops, time of the year and the phase of the growing season, all need to be taken into account and recorded. These characteristics, both population-wide and specific, should allow investigators to narrow down the numbers of unknown decedent records that need to be examined and assist the medical examiner in preparing the death certificate for submission for the tracking of trauma and disease, and other health-related issues in this population.

Personal Identification, Migrant Farm Workers, Forensic Anthropology