



### D86 The Phenomenon of the Urban Mummy

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After attending this presentation, attendees will have an understanding of the constellation of environmental factors and events leading to human mummification in urban settings, and the importance of the multidisciplinary approach to the medicolegal investigation of such deaths.

This presentation will impact the forensic science community by contributing to the increased awareness of the study of these unusual cases, and the unique aspects of the medicolegal investigation of these deaths.

The environmental mummification of a body in an urban setting is a fairly unusual event. Florida is known for its high temperatures and humidity, which typically contribute to the rapid decomposition and putrefaction of decedent's bodies. The resulting foul odor is frequently the signal leading to the discovery of the bodies of individuals whose deaths occurred in solitary locations. This, coupled with prevalence of insect activity, usually precludes the mummification process. However, under certain circumstances, Florida's unique climate provides an environment suitable for mummification. A particular constellation of human behaviors and scenarios must coincide for this phenomenon to occur in an urban setting.

The first requirement is that the decedents must have lived in socially isolated circumstances. Such isolation may result from multiple etiologies, such as illness, substance abuse, criminal activity, language barriers, and/or advanced age. Florida is home to a large number of individuals who lead an isolated existence: the homeless, who may purposely isolate themselves as a safety measure to protect themselves and their property; the mentally or physically ill, who are isolated as a result of their impairments; and, the elderly, whose longevity may result in their isolation after the deaths of friends and family, are all at risk. Reclusive behavior is almost essential for a death to go unnoticed and to meet the time requirements for the decompositional mummification process to proceed.

The apathy of nearby individuals to the welfare of the decedent or the lack of knowledge of the decedent's presence in the community is another factor. If neighbors call attention to the absence of the decedent, a well being check will usually interrupt this process. The failure of public officials to recognize the signs of a potentially undiscovered death is also a necessary condition. These may include law enforcement, mail carriers, and/or public safety officials. Even with isolationist behavior, violations of urban laws or ordinances may result in the inspection of a home by public officials. These public service representatives must be apathetic to the absence of the decedent or equate his or her absence with the abandonment of the dwelling. Finally, the body must be in a hot, dry, closed environment where it is protected from insect and animal predation. The death of an individual in an exposed location is often appreciated by the local fauna as a ready food source, long before humans become aware of the death. This predation results in the consumption and scattering of the remains rather than their mummification.

Several cases in which mummified bodies were discovered in urban locations in southwest Florida have recently been investigated. The literature pertaining to such unusual cases is sparse. These cases highlight the importance of the multidisciplinary approach to the medicolegal investigation of such deaths and the determination of the cause and manner of death.

#### **Urban Mummy, Medicolegal, Investigation**