



### **D6 The Diagnostic Value of Doll Reenactment for the Investigation of Sudden Unexplained Infant Deaths**

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The goal of this presentation is to demonstrate the contributions of doll reenactment in the investigation and certification of sudden unexplained infant deaths (SUID).

This presentation will impact the forensic science community by showing how doll reenactments are important in documenting the infant's position as well as their physical relationship with environmental factors and co-sleeping companions. This evidence based practice allows the forensic pathologists to better visualize first responder observations and therefore provide more reliable death certification.

The Centers for Disease Control and Prevention (CDC) has found that the decline in sudden infant death syndrome (SIDS) rates since 1995 have been offset by increasing rates of other types of sudden unexplained infant deaths (SUID). A recent review by the Medical Examiner Office in Wayne County, Michigan where doll reenactments are routinely performed during SUID scene investigations, suggests that asphyxia plays a greater role in many sudden infant deaths than has been previously reported. Co-sleeping continues to be a significant risk factor involved with SUID. Doll reenactments are important in documenting the infant's position as well as their physical relationship with environmental factors and co-sleeping companions.

The CDC has identified scene reconstruction using a doll to depict both "placed" and "found" positions as important in SUID investigation. It is suggested that doll reenactment allows the forensic pathologists to better visualize first responder observations and therefore provide more reliable death certification. However, death investigators, law enforcement professionals, and medical examiners remain reluctant to perform or dismiss doll reenactments because of emotional concerns for the parents and for themselves. Using an evidence-based model, this study documents the contributions of doll reenactment in the investigation and certification of sudden, unexpected infant death by the Milwaukee County Medical Examiner Office in Milwaukee, Wisconsin.

Beginning in June 2005, the Milwaukee County Medical Examiner Office implemented CDC's doll reenactment protocol as a routine component of pediatric death investigation. This review examines the contributions of doll reenactment in determining the cause and manner of death in cases from June 2005 through May 2007 in comparison to the previous two-year period during which doll reenactments were not performed. Initial findings indicate an increase in the percentage of deaths certified as accidents with a corresponding decrease in the percentage of deaths certified as undetermined. Co-sleeping was a risk factor in approximately 60% of all SUID cases reviewed.

**Doll Reenactment, Sudden Unexplained Infant Deaths (SUID), Co-Sleeping**