



Pathology Biology Section – 2003

G1 Investigation of Infant Fatalities in Maryland (1990-1999)

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The goals of this presentation are to learn the value of the infant death scene investigation and to identify certain epidemiological characteristics of Sudden Infant Death Syndrome (SIDS).

From 1990 to 1999, the Office of the Chief Medical Examiner (OCME) investigated a total of 1,510 sudden infant deaths. SIDS was the leading cause of death in this infant population (51%). Since 1994, the SIDS rate in Maryland has dropped significantly. However, the number of infants that died of accidental or non-accidental injuries remained consistent during the same time period.

Sleeping locations and positions of all the infants were documented in the investigations. A total of 342 infants were found sleeping in bed with an adult or adults (bed-sharing) at the time of death. Of the 342 bed-sharing infants, 265 (77%) died of SIDS, 45 (13%) died of natural diseases, and 11 (3%) died of asphyxia due to overlay. There were 21 bed-sharing infants whose cause and/or manner of death could not be determined. Of the 778 SIDS infants, 467 (61%) were found unresponsive on their stomach, 126 (16%) on their side, and 70 (9%) on their back. More than 38% SIDS infants who were placed to sleep on their side were found on their stomach. Since 1997, the proportion of prone sleeping SIDS has reduced from approximately average 60% prior to 1997 to only 25% in 1999.

During the past 10 years, 27 infants died of positional/ compressional asphyxia due to unsafe sleeping environments, such as defective crib; defective side rails on crib/bed; mattresses that were too small for crib/bed, allowing space between mattress and the head or foot boards, or space between the mattress and the wall. All the situations allow the infants to slip down and become wedged. Eleven infants were suffocated by entanglement in bedding materials, such as plastic covers, quilts, blankets, and pillowcases. Since the risks for the accidental suffocation can be modified, it is very important for the investigators to carefully examine the scene and personally interview the individuals who were caring for the infant and who discovered the child. Such efforts could prevent potential dangerous sleeping environments and save lives.

This report focuses on the importance of infant death scene investigation in determination of the cause and manner of sudden infant deaths. Certain characteristics of SIDS victims are also presented.

Sudden Infant Death, Bed-sharing/Sleeping Position, Death Scene Investigation