

SHAKE UP MISSOURI:
DOCUMENTING FATAL ABUSIVE HEAD TRAUMA INCIDENCE IN MISSOURI

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ABSTRACT

Abusive head trauma (AHT), commonly referred to as “Shaken Baby Syndrome,” is the leading cause of fatal inflicted injury among infants. Previous attempts to estimate the incidence of fatal AHT have used inconsistent definitions, resulting in varied estimates of the number of infants affected by AHT each year. This descriptive study examined the incidence of fatal AHT in the state of Missouri by applying standardized CDC definitions of AHT to death record data from Missouri for a 10-year period. Annual and aggregate rates of Fatal AHT incidence rates were calculated from 2000-2009. An ecological analysis was also conducted to determine whether incidence of fatal AHT decreased following implementation of Missouri statute 191.748, which mandates AHT education for all new mothers in Missouri obstetrical wards. The effectiveness of this law was evaluated using the Poisson regression to compare fatal AHT incidence in the five years before after the law was enacted. Findings from this study found a total of 46 deaths related to AHT, and demonstrated annual and 10-year rates of AHT that approximated those found in a study of national data using the same definition. Demographic analysis demonstrated that white (67.4%), male (67.4%), infants (54.3%) are most commonly victims of AHT. Results of the Poisson regression indicated that there was no statistically significant difference between the rates of death due to abusive head trauma in the time periods under consideration (OR 1.6; 95% CI 0.72-3.56). Findings from this study suggest that more stringent legislation is needed to reduce the incidence of AHT in Missouri. Further study of the CDC definition in small populations is also needed to determine its utility and effectiveness.