

## Pathology/Biology Section - 2013

## G73 Neonaticide: A Retrospective Analysis of Characteristics and Trends of 55 Cases

Emily J.H. Dennison, MD\*, 1715 Trevilian Way, Louisville, KY 40205; Tracey S. Corey, MD, OCME, 810 Barret Ave, 7th Fl, Louisville, KY 40204; and Joy L. Shelton, BA, and William H. Donaldson, BA, FBI, Behavorial Analysis Unit III, 1 Range Rd, Quantico, VA 22315

After attending this presentation, attendees will learn: (1) common demographics of neonaticide victims, including circumstances surrounding the pregnancy, crime scene characteristics, method of discovery, and cause of death; (2) common characteristics of neonaticide offenders; and, (3) diagnostic tests and difficulties in neonaticide investigations.

This presentation will impact the forensic science community by increasing the awareness among criminal justice professionals and forensic pathologists of the potential investigative challenges in neonaticide cases and will provide recommended investigative techniques.

Neonaticide is frequently defined as the killing of a newborn, most commonly by the biological mother, within 24 hours of birth. While not uncommon, this crime is difficult for pathologists, investigators, and families alike to understand. This FBI retrospective study analyzes the largest known collection of neonaticide cases from 20 states between the years 1992 to 2009 in an effort to better understand this crime and how to recognize it at the time of autopsy. Fifty-four female offenders with 55 related infant deaths (one offender killed two infants in separate incidents) were identified through the FBI's internal databases, law enforcement partners and publicsource information. The perpetrators' average age was 21.7 years. Thirty-three percent had other living biological children, while 43% had previously been pregnant (although not all resulted in live births). Most of the perpetrators (96%) were hiding the pregnancy from family members. While all offenders knew they were pregnant and confirmed this to a family member or friend, only 5% of these women had the pregnancy confirmed by a medical doctor. Regarding victims, male victims (55%) were slightly more common than female victims (45%). Caucasians (49%) made up the majority of victims, with Hispanic (18%), Bi-racial (15%), African American (9%), Native American (6%), and Asian (4%) victims being less common. Fifty-eight percent of victims were discovered in an indoor location, the offender's residence being the most common place of discovery (53%). Victims discovered at an outdoor location (33%) were usually found outside the perpetrator's residence in a trashcan, the backyard, or on the roof. Most commonly (38% of cases), the victims were discovered once police were dispatched to the home after the mother sought medical attention, was found to have recently given birth, and medical personnel contacted authorities. The time interval between birth and discovery was less than 24 hours in 77% of the cases where the time interval was recorded (13 cases). In 75% of cases, no decomposition of the victim was identified. Five percent had mild decomposition, 5% showed moderate decomposition, and 15% had severe decomposition. While only in 87% of cases did a forensic pathologist specifically list "live birth" on the autopsy report, all cases were presumed to be live births since the deaths were ruled as homicides. Most pathologists used a combination of methods to determine live birth (89% of cases), with the combination of the hydrostatic "float" test on the lungs, microscopic evaluation of the lungs and other tissues, and confirmation of air in the lungs and gastrointestinal tract via gross examination or X-ray being the most common combination of methods (27.5%). Forty-five percent of cases relied on the history to help determine live birth, with 16% of cases relying solely on history, as Cause of Death (COD) could not be determined. The COD was determined in 84% of cases, with asphyxia deaths (80%) being the most common cause. Of these, 62% were due to suffocation, 30% were due to drowning, and 8% were due to strangulation. Of those deaths where a single COD was identified, 13% were due to sharp force injuries. 7% were blunt force injuries and 7% were due to exposure. In 27% of cases, the pathologist ruled the COD as multifactorial, with suffocation and exposure being the most common combination (73%). In neonaticide, as in many other forensic pediatric deaths such as SUID and drowning, the COD is made on the totality of the circumstances. The pathologist must consider the historical information, scene investigation, and pathologic findings when rendering an opinion regarding cause and manner of death. Neonaticide, Child Homicide, Pathology