



W10 The Investigation and Analysis of Health Care Serial Killers

*Laura M. Labay, PhD**, NMS Labs, Willow Grove, PA 19090; *Donna M. Papsun, MS*, NMS Labs, Willow Grove, PA 19090-2910; *Michael M. Baden, MD*, New York, NY 10019 *Beatrice Yorker, JD**, California State University, Los Angeles, Los Angeles, CA 91103; *Steven M. Marcus, MD**, Montville, NJ 07045; *Tim Braun**, National Center for Missing & Exploited Children, Alexandria, VA 22314; *Paul Uribe, MD**, Armed Forces Medical Examiner System, Dover Air Force Base, DE 19902; *Kevin M. Legg, PhD**, Center for Forensic Science Research and Education, Willow Grove, PA 19090; *Vincent Marks, DM**, University of Surrey, Guilford, UNITED KINGDOM

Learning Overview: After attending this presentation, attendees will: (1) state the different motivations of health care serial killers; (2) understand some of the challenges associated with analytical testing and result interpretation; (3) list the agents that have been used in medical killings and describe their mechanism of action; and (4) understand how to best prepare for case presentation in a legal proceeding.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by providing a multidisciplinary approach to understanding, identifying, and investigating health care serial killers.

A health care serial killer, sometimes referred to as an Angel of Death or an Angel of Mercy, is a unique type of criminal offender who, while employed as a medical provider, intentionally ends the life of a patient. Infamous examples include: physician Michael Swango, who is estimated to have killed more than 60 people; LVN Genevieve Jones, who murdered infants and children; and physician Harold Shipman, who killed hundreds of patients. The motivations are varied, but include ending the suffering of a patient who likely will not recover, minimizing the emotional toll on relatives and loved ones, achieving recognition from their colleagues by accomplishing life-saving resuscitation measures, and exerting dominance over a helpless or weaker individual.

These cases are challenging to recognize as they typically occur over an extended period of time, involve different employers, and include patients who are severely ill and/or have a terminal diagnosis. The latter situation means that because a reasonable competent cause of death already exists, the death may not be heavily scrutinized. Furthermore, analytical evidence or proof may be lacking since hard-to-detect substances, such as epinephrine, succinylcholine, insulin, and heparin, may be used. Instead, identification and in-depth investigations tend to occur when a correlation between a care provider's presence and a cluster of deaths is observed. A high-profile prime example is the Cullen case. Cullen was a nurse who was able to move from facility to facility in New Jersey and Pennsylvania in spite of his questionable employment record and even though suspicions were raised by coworkers that he was harming patients. He eventually confessed to killing more than 40 patients over the course of 16 years.

Medical and forensic science practitioners must be well-versed in detecting these deaths and, when required, be equipped to perform a thorough and lengthy investigation. Due to the complexity of these cases, most will require a multidisciplinary approach and include input from legal investigators, toxicologists, and forensic pathologists. Another facet is the prevention of these deaths. For example, what systems are in place at care facilities to monitor the dispensing and use of medications, and are there any mechanisms or safeguards from a psychiatric standpoint that allow for the profiling and identification of at-risk care providers? Greater insight learned from previous cases and more understanding about the perpetrators may aid in limiting future deaths and helping direct investigations.

Medical Killers, Health Care Serial Killers, Angels of Death