



### E19 Custody Deaths in Northern New Jersey — A Five Year Review

Zhongxue Hua, MD, PhD\*, J. Shaikh, MD, N. Mambo, MD, A. Zhang, MD, T. Blumenfeld, MD, J. Amolat, MD, E. Lilavois, MD, G. Jackson, PhD, L. Perez, MD, C. Blanchard, MD, and G. Hart, MS, Regional Medical Examiner's Office, 325 Norfolk Street, Newark, NJ 07103

After attending this presentation, medical examiners/coroners, medico-legal investigators, and other forensic practitioners will learn the cause and the manner of custody deaths examined at the Regional Medical Examiner's Office in Newark, New Jersey. A high percentage (28%) of non-natural manners of death during custody was reported.

This presentation will impact the forensic community and/or humanity by discussing the results of a study that revealed a significant percentage (28%) of custody deaths were due to non-natural manner of death. With a few exceptions, these cases usually occurred without significant public awareness. Detailed investigation and adequate prevention of custody deaths are of public interest.

Custody deaths are of significant social interest. By the current State Medical Examiner's Regulation in New Jersey, all custody deaths (involving either law enforcement agency or other institutional facility) are investigated by local medical examiners. The study discussed the common cause and manner of death for all custody deaths in northern New Jersey during the last 5 years.

A retrospective record review was conducted at the Regional Medical Examiner's Office in Newark, New Jersey to identify all reported custody deaths from January 2001 to December 2005. The Newark Regional Medical Examiner's Office covers four counties in northern New Jersey, with a population of 2.2 million. Protocol for custody deaths requires an on-call medical examiner and an in-house medico-legal investigator to attend scenes together. All custody deaths are mandated to be autopsied, except for those occurring after a prolonged hospitalization for well-established natural diseases. In this study, available reports from autopsy, scene investigation, toxicology, hospital medical records, and law enforcement agency were reviewed. Both the cause and manner of death were reviewed, with special attention to non-natural manners of death, including suicide, accident and homicide.

During the years of 2001 to 2005, there were a total of 177 custody deaths, with 141 deaths under the custody of law enforcement personnel and 36 deaths under the custody of institutional facility personnel. All cases were reported to and investigated by the Regional Medical Examiner's Office, with approximately 64% (113 deaths) of those individuals autopsied and the remaining 36% (64 deaths) with external examination plus toxicology analysis. Of those 177 deaths, 70% were under the age of 50, 81% were male and 28% were Caucasian. About 128 deaths (73%) were due to natural diseases. The most common causes of natural deaths were cardiovascular disease (45 cases), end-stage acquired immunodeficiency syndrome (26 cases), non-AIDS related pneumonia / sepsis (18 cases), and end-stage malignancy (14 cases).

A total of 49 custody deaths (28%) were determined to be due to non-natural manner of death, including accident (21 cases), suicide (18 cases), homicide (8 cases), and undetermined (2 cases). Acute substance abuse (predominantly cocaine and opiates) accounted for most of the accidental deaths (19 out of 21 cases). Hanging accounted for most of the suicidal deaths (17 out of 18 cases). The eight cases of homicidal deaths included five with "blunt injuries," two with "gunshot wounds," and one with "mechanical asphyxia complicating physical restraint." The two cases of "undetermined" manner of death included one with "pulmonary thromboembolism secondary to deep vein thrombosis of legs" and the other with "blunt force trauma of torso."

Two high-profile police custody deaths involved drug intoxication, "excited delirium" and violent restraint. The presenters attributed the cause of death as "sudden death due to acute intoxication with violent behavior requiring physical restraint" and "cardiac arrest following restraint for drug induced delirium." The determination of manner of death (i.e., accident vs. homicide) for police custody deaths requires careful scene investigation and interviewing of all relevant witnesses.

#### **Custody Deaths, Cause of Death, Manner of Death**