

## E87 A Longitudinal Evaluation of Death Investigation of Elder Abuse and Neglect Deaths

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**Learning Overview:** After attending this presentation, attendees will be able to apply initial screening criteria in elderly deaths to identify when additional death investigation is necessary to rule out abuse and neglect.

**Impact on the Forensic Science Community:** This presentation will impact the forensic science community in two ways. First, it establishes a prevalence of deaths with first-level suspicion of elder abuse and neglect in a large metropolitan area; secondly, it provides criteria to quickly screen elder deaths for abuse and neglect in order to identify cases that need further investigation.

The purpose of this study was to develop simple criteria to screen elder deaths to ascertain which deaths require more intensive investigation in order to rule out abuse or neglect. This study retrospectively applied these criteria to a five-year longitudinal population of deaths undergoing a full autopsy at a large metropolitan medical examiner office. The deaths identified with these screening criteria (hereafter referred to as "first-level suspicion of abuse") comprise approximately 10% of deaths ≥65 years old.

This was a retrospective study (2015–2019). The population included all deaths ≥65 years old, and the researchers included only cases where the body was brought to the office for further examination (autopsy or external). However, only deaths undergoing a complete autopsy were screened. The criteria for first-level suspicion included: (1) dependence on another person(s) for at least one Activity of Daily Living (ADL), and (2) at least one marker/indicator of abuse or neglect. The markers included seven items: delay in seeking care for an injury or acute change in health status; suspicions expressed by health care workers, law enforcement, family or friends; unclean or unlivable living space; no physician visit (or ongoing prescriptions) within one year of death WITH documented medical history; poor hygiene; unexplained physical trauma; and suspicious circumstances. This study also established criteria for exclusion; some of these were obvious (e.g., death in a motor vehicle crash), while some were more subjective (hoarder residence, homeless, substance abuse).

Of the 5,298 decedents ≥65 years old who were examined, 2,798 (53%) received complete autopsies and 2,500 (47%) external examinations. Of the ,2798 receiving an autopsy, 474 (17%) screened positive for first-level of suspicion of abuse. These cases had several identified areas of dependence on another for an ADL of which 220 (46%) mobility/transferring, 154 (32%) maintaining continence, 58 (12%) dressing, 53 (11%) eating and met at least one marker/indicator of abuse or neglect. Specifically, 322 (70%) had injuries, 180 (38%) had a reported suspicion of abuse or neglect surrounding the death, 107 (23%) had a change in health or injury with a delay in seeking care, 77 (16%) had not seen a Primary Care Physician (PCP) within a year with documented medical history, 71 (15%) had the presence of and/or report of poor hygiene, 34 (7%) had a history of interpersonal violence, and 32 (7%) resided within an unclean/unlivable living environment.

The total number of male and female decedents were 238 (50%) and 236 (50%), respectively. Race/ethnicity included non-Hispanic White 270 (57%), Black 118 (25%), Hispanic 67 (14%), and other 19 (4%); the latter includes Asians, American Indians, multi-ethnic, and unknown. The age median (Interquartile Range [IQR]) was 77.05 (69.6–86.2). Of the 474 deaths, 326 (69%) had been residing at a personal residence at the time of death, and 148 (31%) had resided within an environment with third-party providers (nursing home, assisted living, group home). Moreover, 174 (37%) had a recognized cognitive impairment, 109 (23%) had decubitus ulcers with 29 (27%) receiving care. The manner of death breakdown was as follows: 264 (56%) natural, 144 (30%) accident, 44 (9%) homicide, and 22 (5%) undetermined. Lastly, 236 (49.8%) of the deaths had a scene investigation with the remainder dying within an in-hospital setting.

These criteria can be quickly applied in prospective death investigations as they are reported in order to identify deaths that require further investigation for abuse and neglect. The prevalence of these deaths, even in a large medicolegal jurisdiction, is relatively low, despite the large number of deaths in the  $\geq$ 65 years old age category. It follows that more intensive investigation of deaths after application of these criteria is realistic, even in this large jurisdiction.

Forensic Science, Elder Abuse and Neglect, Elderly Death Investigation