

E44 Medicolegal Death Investigator Workplace Safety Hazards: A Scoping Review of the Literature

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Learning Overview: The goal of this presentation is to provide preliminary results of a scoping review addressing medicolegal death investigator workplace hazards.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by offering a process for conducting a scoping review of a wide body of evidence to delineate eligible studies and identify knowledge gaps in the literature based upon a topic of interest.

Death investigators, because of dangers faced in on-scene investigations, have physical work requirements that may result in injury and illness that could lead to disability, absenteeism, or even death. Because death investigators face safety risks and occupational hazards similar to first responders (law enforcement officers, firefighters, emergency medical service, crime scene technicians), the research topic search was expanded to include these studies. The research team set a criterion for extraction to include research design and methodology, commonly occurring safety risks, reports dealing with physical and mental effects, and considered strategies for prevention to increase safety.

The research team used the framework proposed by Arksey and O'Malley and the Joanna Briggs Institute to guide the scoping review.^{1,2} The five steps followed were to: (1) propose the question, (2) identify relevant studies, (3) select eligible studies, (4) document the evidence selected, and (5) summarize the results. The team proposed the question of: "What are the prevalent occupational safety risks and health-related conditions contributing to death investigator injury, disability, and death?" The pilot results from one database (Medline Complete [Ebsco]) retrieved or identified over 6,000 articles. Two independent researchers used Covidence software to identify relevant study citations by screening the title and abstract, excluding studies that dealt exclusively with occupational safety issues exclusive to law enforcement, firefighters, or emergency medical technicians. Covidence software was then used to manage the storage of the 43 full-text articles identified as eligible and to extract data from those articles.

The extracted data was stored on an abstraction form developed in Google® Forms. Of the 43 articles, seven met inclusion criteria. Of the seven, five (71.4%) utilized survey design, one (14.3%) was a systematic review, and one (14.3%) was a case study. The majority of the articles, six out of seven (85.7%), were specific to a wide range of employees within the setting of medical examiner or coroner offices. Of the seven articles, four (57.7%) addressed the emotional or mental health well-being of medical examiner and coroner office employees, which included death investigators. Three articles addressed occupational safety due to contagion from infectious disease, with three out of seven (42.9%) specifically addressed the forensic pathologist role, and one out of seven (14.3%) infectious disease safety among "death workers" in general. The findings of this pilot scoping review support the need to fill a gap in the literature addressing occupational safety of death investigators. These results serve as an initial step toward a more intensive investigation of death investigators' workplace safety.

Reference(s):

1. Arksey, Hilary, and Lisa O'Malley. Scoping Studies: Towards a Methodological Framework. *International Journal of Social Research Methodology* 8, no. 1 (2005): 19–32.
2. Peters, Micah D.J., Christina Godfrey, Patricia McInerney, Zachary Munn, Andrea C. Tricco, and Hanan Khalil. Chapter 11: Scoping Reviews (2020 Version). In *JBI Manual for Evidence Synthesis*, edited by E Artomataris and Z. Munn (JBI, 2020). <https://synthesismanual.jbi.global>, <https://doi.org/10.46658/JBIMES-20-12>.

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