

OSAC RESEARCH NEEDS ASSESSMENT FORM



Title of research need:

Assessing the utility of autopsy in contentious medicolegal categories of death

Keyword(s):

Autopsy, utility, medicolegal, external examination, inspection

Submitting subcommittee(s):

MDI

Date Approved:

6/30/2025

Background Information:

1. Does this research need address a gap(s) in a current or planned standard? (ex.: Field identification system for on scene opioid detection and confirmation)

Not at this time.

2. Are you aware of any ongoing research that may address this research need that has not yet been published (e.g., research presented in conference proceedings, studies that you or a colleague have participated in but have yet to be published)?

No.

3. Key bibliographic references relating to this research need: (ex.: Toll, L., Standifer, K. M., Massotte, D., eds. (2019). Current Topics in Opioid Research. Lausanne: Frontiers Media SA. doi: 10.3389/978-2-88963-180-3)

Possible Study Models to Assess the Utility of Autopsy in Contentious Medicolegal Categories of Death: A Report and Recommendations Prepared by the Research Committee of the Scientific Working Group on Medicolegal Death Investigation (SWGMDI) [available at swgmdi.org]

What is a complete autopsy? Evan Matshes, Chris Milroy, Jacqueline Parai, Barbara Sampson, Ross Reichard, Emma Lew. Acad Forensic Pathol 2011 (1): 2-7

4. Review the annual operational/research needs published by the National Institute of Justice (NIJ) at <https://nij.ojp.gov/topics/articles/forensic-science-research-and-development-technology-working-group-operational#latest>? Is your research need identified by NIJ?

No.

5. In what ways would the research results improve current laboratory capabilities?

Controversy abounds within forensic pathology and death investigation. Long a discipline in which forensic pathologists expressed opinions as facts, forensic pathology is undergoing a gradual transition toward evidence- based practice. Despite this trending towards an evidentiary approach to diagnoses, limited evidence exists in some subject areas to guide fundamental facets of practice. Emblematic of this deficiency is the near-total lack of uniformity in the assessment of necessity for autopsy. Further complicating this matter is profession-wide

ambiguity about the definition of a complete autopsy. Although the National Association of Medical Examiners (NAME) has developed autopsy standards, a general lack of agreement among practitioners still exists regarding what extent of examination should be performed in certain types of cases. We take as axiomatic that autopsy is the practice of medicine and is performed and interpreted in the context of a medicolegal death investigation.

The research would not improve laboratory capabilities per se. The point is that we do not have an evidentiary basis to make practice decisions on when autopsies should be performed.

6. In what ways would the research results improve understanding of the scientific basis for the subcommittee(s)?

An evidentiary basis for practice decisions would clarify the utility of autopsy and allow us to most appropriately direct limited resources toward the cases in which the utility is justified.

7. In what ways would the research results improve services to the criminal justice system?

An evidentiary basis for practice would promote consistency of practice and ensure that the appropriate cases are autopsied, in order to be able to answer both the anticipated and the unanticipated questions by the criminal justice system.

8. Status assessment (I, II, III, or IV):

I

	Major gap in current knowledge	Minor gap in current knowledge
No or limited current research is being conducted	I	III
Existing current research is being conducted	II	IV

This research need has been identified by one or more subcommittees of OSAC and is being provided as an informational resource to the community.