

OSAC RESEARCH NEEDS ASSESSMENT FORM



Title of research need: Modeling of MFI missing person and victim data

Keyword(s): Disaster victim identification, victim accounting, missing persons, mass fatality

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)

No.

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)

None.

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?

There is currently no means to anticipate the volume and variety of data that result from, and must be managed following a mass fatality incident. The existing assumptions are anecdotal and based on a small number of incidents. The volume of data (missing persons call centers, victim information centers, hospitals, law enforcement etc.) available from previous incident after action reports should be used to systematically develop reliable expectations for medicolegal operations. The development of reliable expectations for the volume and variety of data involved in a mass fatality incident will allow local medicolegal jurisdictions to develop more informed planning documents and build the appropriate capabilities for managing data (call centers, data management systems, etc).

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

The lack of existing expectations results in either the absence of preparedness or preparedness efforts focused on anecdotal or inaccurate expectations at the local, state, and federal level. This research would provide the subcommittee with information to develop scientifically supported standards and best practices for jurisdictional adoption.

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

Accurate expectations will contribute to determining more efficient, effective, and accurate means of managing incident data, ultimately contributing to the positive identification of decedents during a mass fatality incident.

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.