OSAC RESEARCH NEEDS ASSESSMENT FORM



Title of research need:

Witness Information for Fire & Explosion Scenes

Describe the need: Fire investigators are well informed on the need to develop information from those who first observe the fire and from those who subsequently arrive to extinguish the fire. Fire investigators also are aware of the importance of gathering information from those familiar with the pre-fire conditions; like the layout of furnishings and appliances in the room of origin. Training is common on how to conduct such interviews, but uncommon on how to accurately use the information for origin determination. There is no specific process outlined within NFPA 921 for use of eyewitness information. Research is required to develop protocols or techniques for collecting, extracting, and analyzing data from the variety of witnesses from a fire scene (e.g. eyewitness, first responders, and owners).

Keyword(s):

Witness interviews, collection of data, fire origin determination

Submitting subcommittee(s):

Fire & Explosion Investigation | Date Approved:

March 10, 2021

(If SAC review identifies additional subcommittees, add them to the box above.)

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)

There is no specific process outlined within NFPA 921 for use of eyewitness information.

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

No.

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)

Lord, J, Geiman, J (2012). Systematic Analysis of Witness Statements for Fire Investigation, Fire Technology 48(2), April 2012. DOI 10.1007/s10694-101-0208-3

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-groupoperational#latest? Is your research need identified by NIJ?

No.

5. In what ways would the research results improve current laboratory capabilities? This research is specifically targeted to improving the methods used by fire investigators in gathering and analyzing the statements of witnesses to fire events. Specific guidance is needed to understand how witnesses react to and perceive fire events. Guidance is also needed on how witnesses interpret and report their observations.

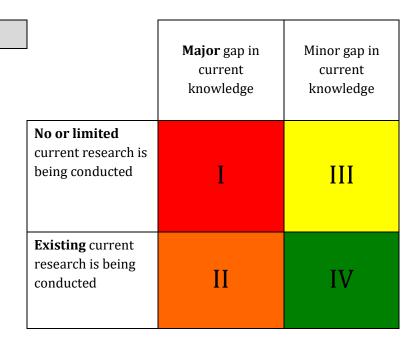
6. In what ways would the research results improve understanding of the scientific basis for the subcommittee(s)?

See Number 5.

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

This research will help the fire investigation community to apply a more systematic approach interviewing witnesses and evaluating their statements. This more systematic approach will improve expert opinions and testimony relating to fire investigation.

8. Status assessment (I, II, III, or 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.