OSAC RESEARCH NEEDS ASSESSMENT FORM

Title of research need: Partnership with Hospitals in Delayed Drug-Related Deaths

Keyword(s): Drug-Related Deaths, Delayed Deaths, Hospital

Submitting subcommittee(s): MDI Date Approved: 2/28/2021

(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)
   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.

   None located.

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?

   When an individual is found unresponsive at a scene due to a suspected drug overdose, they are conveyed to the hospital if emergency medical services achieve successful cardiopulmonary resuscitation. When the individual arrives at the hospital, admission blood/urine is obtained and stored in the hospital laboratory. Based on the hospital, admission blood/urine is kept for a certain period of time before being discarded. There are times when an individual survives for a longer period of time in the hospital, past the time period where the hospital keeps admission blood, only to die days later. In these cases, forensic pathologists/coroners must rely on less than optimal information – admission urine drug screens and basic blood drug screens, if completed. By implementing a nationwide partnership with hospitals and medical examiner / coroner offices that provided clear direction to save all admission specimens on individuals who come to the hospital after a suspected drug overdose, the laboratory capabilities will increase due to optimal specimens available for testing.
6. In what ways would the research results improve understanding of the scientific basis for the subcommittee(s)?

Medicolegal death investigation is focused on getting the right answers. In suspected delayed drug-related deaths, if an individual is admitted to the hospital for several days, often time, the right answer is in the admission blood/urine sample.

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

The criminal justice system would know exactly what drugs and at what concentrations were in an individual in suspected drug-related deaths where an individual survives for an extended period of time and dies from complications of the drug overdose.

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

<table>
<thead>
<tr>
<th>Major gap in current knowledge</th>
<th>Minor gap in current knowledge</th>
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<tbody>
<tr>
<td>No or limited current research is being conducted</td>
<td>I</td>
</tr>
<tr>
<td>Existing current research is being conducted</td>
<td>II</td>
</tr>
</tbody>
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This research need has been identified by one or more subcommittees of OSAC and is being provided as an informational resource to the community.