

Unexplained Death (UNEX) Investigation Protocol – Arizona Department of Health Services

Purpose: To identify deaths that might be of public health significance such as infectious diseases that are transmitted person-to-person, require a public health intervention, represent a new/emerging infection or are an act of terrorism.

Guidelines: (patient must meet at least one of the following criteria)

1. Hospital/facility-based death, no known cause **AND** history of fever ($>38.0^{\circ}\text{C}/100.4^{\circ}\text{F}$) **OR** temp. $<36^{\circ}\text{C}/96.8^{\circ}\text{F}$ within 48hrs of death
2. Patient-reported history of fever within 48hrs of death, without known cause
3. Clinical suspicion of infectious etiology by health care provider/medical examiner

Investigation Protocol: (conducted by the local health department unless otherwise specified)

*****Within 24hrs of case identification, the local health agency should be notified*****

1. Use the UNEX Death Report Form throughout the investigation.
2. Contact ADHS UNEX team within 1 working day of receipt.
3. Determine whether the case resided in your county and if it needs to be transferred to another county for investigation. The ADHS UNEX epidemiologist will take the lead on reservation cases.
4. Obtain and review the medical chart, if available.
 - a. Fax chart to ADHS UNEX team – ATTN: UNEX (fax number: 602-364-3199)
 - b. If no chart available, contact next of kin/other person (ME investigator) to obtain details for the investigation. Unless urgent, contacting the family through the ME investigator is preferable.
5. Determine whether an autopsy will be performed by contacting hospital/medical examiner.
 - a. If yes, obtain autopsy preliminary results from the medical examiner as well as any other information regarding the death (i.e. exposure information from next of kin).
 - b. Depending on ME findings, arrange for collection of appropriate specimens to be sent to the Arizona State Health Laboratory ASHL (see ASHL Services Guide for UNEX Investigations).
6. Obtain lab results identified through the medical chart/attending physician from the hospital/facility
 - a. If lab results indicate an agent that is the likely cause of death (confirm with ADHS) then the investigation is closed and ruled out.
 - b. If no lab results are available from the hospital, the case did not visit a hospital immediately before death, or the laboratory results do not suggest an agent that is the likely cause of death then proceed with the investigation.
7. Determine what specimens are available for further testing from the hospital and medical examiner office.
8. If applicable, talk to the attending physician/infectious disease specialist for the case.
9. Send all above collected information to the ADHS UNEX team – ATTN: UNEX (fax number: 602-364-3199).
10. Based on all the information obtained, a public health differential diagnosis will be created in coordination with ADHS.
11. Specimens are sent to the ASHL for testing to identify or rule out infectious diseases of public health significance, if warranted.
 - a. If post-mortem specimens are submitted to ASHL, the ME should submit the ME Findings Submission Form to the ADHS UNEX epidemiologist (fax number: 602-364-3199) and ADHS will forward to the appropriate local health agency.
12. High priority unclosed cases can be sent to the CDC for additional testing via the ADHS/ASHL team.
13. Laboratory Results:
 - a. If lab results from the ASHL or CDC indicate an infectious disease of public health significance, the local public health agency will initiate an intervention and/or control measures.
 - i. Contact next of kin to obtain necessary information to conduct intervention/control measures, if necessary.
 - b. If lab results from the ASHL or CDC do not indicate an infectious disease of public health significance, the UNEX death investigation will be closed.
14. Upon investigation completion, the UNEX Death Report Form is completed by the primary investigator and submitted to ADHS within 30 days of investigation closure.
15. Within 30 days of form submission, ADHS will complete and submit a written case report/summary to the involved local health agency(ies).
16. Communication of the ADHS UNEX report to family/authorized individuals is the local health department's responsibility.

ADHS UNEX Investigation Protocol Schematic – see next page.

NOTE: The investigation may be stopped if it is determined that the cause of death is not infectious or is not thought to be of public health significance. A UNEX Death Report form must be submitted noting the case was considered and closed.

ADHS UNEX Investigation Protocol Schematic

UNEX Reports to Public Health Agencies

(usually from the medical examiner)

