

## Medical Examiner/Death Investigator Training Requirements in State Medical Examiner Systems

**REFERENCE:** Prahlow, J. A. and Lantz, P. E., "Medical Examiner/Death Investigator Training Requirements in State Medical Examiner Systems," *Journal of Forensic Sciences*, JFSCA, Vol. 40, No. 1, January 1995, pp. 55-58.

**ABSTRACT:** Comprehensive and properly performed investigation of suspicious, unusual, unnatural, and various natural deaths is necessary to maintain the health, safety, and well-being of society as a whole. Adequate investigation requires the combined efforts and cooperation of law-enforcement and other public-service agencies, medical professionals, and those within the forensic community. As such, the "death investigator" plays a crucial role in the investigation process. These front-line investigators, whether they be coroners, medical examiners, physicians, other medical professionals, or lay-people, are required to make important decisions which have far-reaching consequences on how death investigation cases proceed. Death investigation practices vary greatly among medico-legal jurisdictions. A recent publication has categorized state death investigation systems by type of system. In an attempt to better delineate death investigation practices with specific regard to investigators' training and continuing education requirements, we surveyed the 20 systems categorized as state medical examiner systems and the five states with combined state medical examiner and county coroner/medical examiner systems. We present our findings and make recommendations which address the attributes and deficiencies of current death investigation practices.

**KEYWORDS:** pathology and biology, medical examiners, death investigators, training requirements

Properly performed death investigations help to ensure the safety and health of our nation [1-4]. Within the United States, those who investigate suspicious, unusual, and unnatural deaths have historically been under the auspices of the coroner [5,6]. Some coroner systems are easily entangled in politics; consequently, poor, biased, and ineffectual death investigation may result. In addition, a wide variation in quality of investigation is typical when comparing one jurisdiction to the next. Several jurisdictions have attempted to avoid such problems by implementing changes and regulations within their coroner systems. Other jurisdictions have completely done away with the coroner system in favor of the medical examiner system. The Centers for Disease Control (CDC) recent "Death Investigation in the United States and Canada, 1992" [7] separates United States death investigation systems into 3 types: 1) medical examiner systems; 2) mixed medical examiner and coroner systems; and 3) coroner systems; each type is additionally divided into various subcategories.

Despite the type of system in any given jurisdiction, front-line death investigators are necessary for effective, efficient, high-

<sup>1</sup>Department of Pathology, The Bowman Gray School of Medicine of Wake Forest University, Winston-Salem, NC.

quality death investigations. Indeed, the death investigator is perhaps the most crucial element in the entire death investigation process. Although the CDC's "Death Investigation in the United States and Canada, 1992" provides information about each state's death investigation system, complete information regarding death investigator training requirements, continuing education requirements, and enforcement policies is lacking [7]. Such information is occasionally found in the "qualifications" section of the manual, but this vital information is not specifically addressed in a comprehensive fashion. Only occasional references can be found within the forensic literature which address these issues [8-11]. A recent report provides excellent but limited nationwide information regarding death investigation training requirements [11].

To better elucidate the training required of death investigators, we conducted a telephone survey of the 20 states/jurisdictions with state medical examiner systems and the five states with mixed state medical examiner and county coroner/medical examiner systems as categorized by the CDC (Table 1).

### Materials and Methods

Using phone numbers provided in the CDC's "Death Investigation in the United States and Canada, 1992," we contacted the offices of the 20 state medical examiner systems and the 5 mixed state medical examiner and county coroner/medical examiner systems. We spoke to various individuals, ranging from chief medical examiners to death investigators to office managers and other administrative personnel. Each individual was asked a series of questions (Table 2). The questions consisted of 12 factual-based questions (#1-12) and one opinion-type question (#13).

### Results

The results of the survey are presented in Tables 3 to 7. The response rate was 100% for questions 1 to 12 and 76% for question #13. Table 3 shows the limitations of the use of the term "medical examiner." Only six of the systems limit the title "medical examiner" (M.E.) to board-certified (or—"eligible")<sup>2</sup> forensic pathologists. Three states limit the use of the term to pathologists, while eleven states limit its use to physicians. The five remaining states use the term "medical examiner" (or "medical investigator") for non-physicians as well as physicians. In some jurisdictions, other descriptive terms help delineate which M.E. is a board-certified forensic pathologist, pathologist, physician death investigator, or

<sup>2</sup>The term "board-eligible" is not recognized by The American Board of Pathology; however, individuals and certain institutions/agencies use the designation to describe those persons who have completed their forensic pathology training, but have not yet taken the board exam.

TABLE 1—States/jurisdictions included in survey.

State Medical Examiner Systems		
Connecticut	Mississippi	Rhode Island
Delaware	New Hampshire	Tennessee
District of Columbia	New Jersey	Utah
Iowa	New Mexico	Vermont
Maine	North Carolina	Virginia
Maryland	Oklahoma	West Virginia
Massachusetts	Oregon	
State Medical Examiner and County Coroner/ Medical Examiner Systems		
Alabama	Georgia	Montana
Arkansas	Kentucky	

TABLE 2—Survey questions.

1) Within your state/jurisdiction, how is the term “medical examiner” defined?
2) What is/are the title(s) of the person(s) who investigate death in your state?
3) Are specific qualifications required of your death investigators?
4) Do you have a written job description for death investigators?
5) Are death investigators required to receive any specialized training before or immediately after employment?
6) Are death investigators required to receive continuing education while employed as an investigator?
7) Are the above requirements strictly enforced?
8) Do death investigators use an investigation form?
9) Are death investigators provided with an investigation manual or similar written material?
10) How often do death investigators go to the death scene? never rarely sometimes usually always
11) How often do forensic pathologists go to the death scene? never rarely sometimes usually always
12) Are any medicolegal autopsies performed by persons who are not board-certified or board-eligible forensic pathologists or who are not directly under the supervision of a board-certified forensic pathologist?
13) What is the biggest problem with your system?

TABLE 3—Limitation of the use of the term “Medical Examiner” (or equivalent) (25 jurisdictions).

Board-certified (or “eligible”) Forensic Pathologist	6
Pathologist	3
Physician	11
Non-physician	5

nonphysician death investigator; terms such as “chief M.E.,” “deputy chief M.E.,” “deputy M.E.,” “district M.E.,” “regional M.E.,” “county M.E.,” “assistant M.E.,” “physician M.E.,” and “associate M.E.” are used to differentiate between different specialists and professions. Very little consistency exists from one jurisdiction to the next when comparing this terminology; for example, in some states, the term “deputy M.E.” is used to describe a board-certified forensic pathologist. In another state, the same title denotes a non-pathologist physician death investigator. In a different state, the same title describes a non-physician death investigator.

TABLE 4—Titles of death investigators.

Medical examiner
Medical examiner investigator
Deputy medical examiner
County medical examiner
County medical examiner investigator
Physician medical examiner
District medical examiner
Regional medical examiner
Assistant medical examiner
Medical investigator
Deputy medical investigator
Medicolegal death investigator
Field investigator
Investigator
Forensic investigator
Coroner
Deputy coroner
Law enforcement personnel

TABLE 5—Death investigator training (25 jurisdictions).

Death investigators must meet certain qualifications	25
Written job-description	23
Training required prior to or soon after employment/election	11
Continuing education required	9
Continuing education requirements strictly enforced	6
No training of any type required	12

TABLE 6—Additional questions (25 jurisdictions).

Investigation form	25
Investigation manual or other written material	19
Death investigators to scene of death:	
Never	0
Rarely	2
Sometimes	10
Usually	9
Always	4
Forensic pathologists to scene of death:	
Never	0
Rarely	24
Sometimes	1
Usually	0
Always	0
Some autopsies performed by persons other than BC(BE)FP or persons under their direct supervision	10

TABLE 7—Biggest problems regarding death investigation systems (19 respondents).

Problem	# Respondants
Lack of funding	12
Lack of personnel	6
Inadequate death investigator training	5
Lack of central power	2
Lack of computer system	2
Dealing with funeral homes/transportation	2
No subpoena power	1

Table 4 lists the various titles given to front-line death investigators in the 25 jurisdictions surveyed. Not including the generic term "law-enforcement personnel," a total of 17 different titles are used to describe persons responsible for conducting death investigations.

Table 5 presents the responses to questions pertaining to death investigator training requirements. While most of the jurisdictions surveyed have job descriptions and/or specific qualification parameters for their death investigators, nearly one half (12 of 25) require NO training other than that received "on-the-job."

Requisite training programs range from a three-day course to a 52-hour course in those states requiring training before or soon after employment (eleven states) and from one annual seminar to 18 hours per year in states requiring continuing education (nine states). Two of the jurisdictions which require training for non-physician death investigators require no such training for physician death investigators. Three fourths (nine of twelve) of states requiring no formal training rely predominately on physician death investigators; only 5 of the 13 states requiring formal training rely predominately on physician death investigators. Three jurisdictions which "require" continuing education do not or are unable to enforce such regulations. Within the 12 states where no formal training is required, 9 of the surveyed individuals informed us that educational programs are offered and encouraged.

Table 6 lists the responses to questions 9–12. In questions 11 and 12, the frequencies as listed were arbitrarily set as follows: "rarely" = 0–15%, "sometimes" = 16–50%, "usually" = 51–95%, and "always" = 96–100%.

Table 7 lists the responses to question #13. Nineteen of the 25 individuals surveyed elected to respond to this open-ended question. Several people gave multiple responses. The number one problem cited was lack of funding. Lack of personnel and inadequate death investigation training were also mentioned numerous times.

## Discussion

This survey was undertaken to gather pertinent information regarding death investigation within the United States. In the interest of time and efficiency, 25 states were included in this survey.

One obvious realization from the survey results is the lack of consistency in death investigation systems. The meaning of the term "medical examiner" in one state can be entirely different from its meaning in another state (Table 3). This presumably is not cause for concern within any given state, but such inconsistency is certainly a potential source of confusion when interstate proceedings take place. Likewise, the numerous titles assigned to death investigators across the country (Table 4) is likely to create confusion.

Since the titles of death investigators and the meaning of the term "medical examiner" are frequently established by state law, the obvious solution to such confusion, that is, nationwide standardization of such titles, is not likely to occur. Fortunately, however, potential confusion can ultimately be avoided by providing concise definitions when using such terms at national meetings, in publications, and during interstate proceedings. The titles "death investigator" and/or "forensic investigator" seem to be the most appropriate and descriptive for frontline investigators.

Somewhat more disturbing than the terminological inconsistencies are those which relate to death investigator training requirements (Table 5). Forty six percent of the systems surveyed require no formal training, and 33% of those which "require" continuing

education fail to enforce the requirement. This is alarming and should arouse concern throughout the political, medical and forensic communities. Scene investigation is a vital part of many death investigations [1–3]. Recent publications stress the importance of scene investigation in cases of suspected Sudden Infant Death Syndrome [4,12–17]. Indeed, improved, standardized death-scene investigations in ALL suspicious deaths is essential for the well-being of our society. Requiring formal training and continuing education of all death investigators is a first step toward the realization of this goal.

Physician death investigators are exempt from formal training in two systems which require formal training of lay investigators; in addition, 75% of the systems requiring no formal training rely predominately on physician death investigators. Such questionable policy implies that the average physician is adequately trained in death certification and investigation during medical school and/or residency.

Despite the fact that 12 systems do not require formal training or continuing education, at least nine of them offer such programs. In fact, this number may actually be higher since a specific question addressing this issue was not asked. Nevertheless, it is noteworthy that a majority of these systems have some sort of training available; steps toward creation of policy which would require such training will likely be easier with the educational programs already in place.

The use of standardized investigation forms and manuals by a majority of the systems is encouraging and should be implemented by those systems which do not utilize such written instruments. The scene investigation statistics support the overall premise of this study that death investigators play a crucial role in the medicolegal death investigation process. Evidence which supports the predicted shortage of forensic pathologists [18] includes the fact that 10 of the 25 systems surveyed must rely on persons other than BC("BE")FP to perform some medicolegal autopsies. As we continue to face a shortage of forensic pathologists, the role of death investigators, particularly those who have no readily accessible forensic pathologist, will become even more crucial. Implementation of training requirements for physician and lay death investigators is essential in every state. The American Academy of Forensic Sciences (AAFS) and the National Association of Medical Examiners (NAME) must take the lead on this front and make recommendations concerning the standardization of training requirements for our nation's death investigators.

The final question of the survey was an open-ended question with no options for possible answers provided to the respondents. A total of 15 (79%) of the respondents who answered this question cited lack of funding and/or lack of personnel as major obstacles in attaining the best possible death investigation system. The age-old problem continues to be an interesting challenge for the forensic community: How can quality death investigation be provided without adequate funding? Innovative approaches to this problem are necessary to maintain and improve medicolegal death investigation within the United States. We laud the AAFS for its efforts of finding ways this problem can be addressed, and we encourage persons who have found or can envision a "workable" system to share their ideas with the forensic community.

Discussing death investigation systems with various people around the country was very enlightening. It is evident that different systems work well (or poorly) in different situations. Some mixed medical examiner and coroner systems work very efficiently; others seem to be struggling. The same can be said for state medical examiner systems. Some death investigation systems function well

using physician death investigators; others do not. Likewise, lay death investigators with certain backgrounds, that is, nursing, paramedical, physician assistants, law-enforcement, are coveted by some systems and avoided by others. Another encouraging note is that, within many systems, efforts are underway to improve their current death investigation practices. Finally, it is clear that no one system is perfect for all jurisdictions. Just because a system works well in one state does not mean that it will work well in every state. Ultimately, the existence of efficient, effective, death investigation systems in every state is possible only if members of the forensic, medical, and political communities join with society as a whole and demand that it be so.

In conclusion, we offer the following recommendations:

1) When presenting at national meetings, publishing manuscripts, and working with individuals from other states regarding death investigation practices, provide a precise definition of the term "medical examiner," as well as the title(s) of those who are frontline death investigators.

2) The AAFS and/or NAME, along with other agencies, such as the National Institute for Justice, should develop guidelines/recommendations for all jurisdictions regarding formal training and continuing education of death investigators.

3) The AAFS and/or NAME should consider creating a forum (at national meetings or via electronic mail) which would enable members to discuss various death investigation issues. This would allow members to share experiences and ideas, resulting in overall improvement of death investigation systems nationwide.

## References

- [1] Spitz, W. U. and Fisher, R. S., *Medicolegal Investigation of Death*, 3rd Edition, Charles C Thomas, Springfield, IL, 1993, pp. 690-691.
- [2] Knight, B., *Forensic Pathology*, Oxford University Press, New York, 1991, pp. 3-6.
- [3] DiMaio, D. J. and DiMaio, V. J. M., *Forensic Pathology*, Elsevier, New York, 1989, p. 17.
- [4] Bass, M., Kravath, R. E., and Glass, L., "Death-Scene Investigation in Sudden Infant Death," *New England Journal of Medicine*, Vol. 315, No. 2, July 10, 1986, pp. 100-105.
- [5] Spitz, W. U. and Fisher, R. S., *Medicolegal Investigation of Death* 3rd Edition, Charles C Thomas, Springfield, IL, 1993, pp. 4-6.
- [6] Kuroso, M., Nihira, M., Watanabe, T., and Noguchi, T. T., "Death Investigation Systems in the United States," *Nippon Hoigaku Zasshi—Japanese Journal of Legal Medicine*, Vol. 45, No. 4, August 1991, pp. 351-359.
- [7] Combs, D. L., Parrish, R. G., and Ing, R., "Death Investigation in the United States and Canada, 1992," U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, Atlanta, Georgia, August 1992.
- [8] Golden, R. M. and Hirsch, C. S., Discussion of "Evaluation of Medico-legal Investigators' Suspicions and Positive Toxicology Findings in 100 Drug Deaths" (letter), *Journal of Forensic Sciences*, Vol. 31, No. 3, July 1986, pp. 804-805.
- [9] Wright, W. K. and Hirsch, C. S., "The Physician Assistant As Forensic Investigator," *Journal of Forensic Sciences*, Vol. 32, No. 4, July 1987, pp. 1059-1061.
- [10] Stephens, P., "Ensuring Efficient Death Investigation," *Iowa Medicine*, Vol. 82, No. 5, May 1992, pp. 242.
- [11] Hanzlick, R., Combs, D., Gibson Parrish, R., and Ing, R. T., "Death Investigation in the United States, 1990: A Survey of Statutes, Systems, and Educational Requirements," *Journal of Forensic Sciences*, Vol. 38, No. 3, May 1993, pp. 628-632.
- [12] Spitz, W. U. and Fisher, R. S., *Medicolegal Investigation of Death*, 3rd Edition, Charles C Thomas, Springfield, IL, 1993, pp. 725-726.
- [13] Knight, B., *Forensic Pathology*, Oxford University Press, New York, 1991, pp. 416.
- [14] DiMaio, D. J. and DiMaio, V. J. M., *Forensic Pathology*, Elsevier, New York, 1989, pp. 293-294.
- [15] Perrot, L. J. and Nawjczyk, S., "Nonnatural Death Masquerading as SIDS (Sudden Infant Death Syndrome)," *American Journal of Forensic Pathology and Medicine*, Vol. 9, No. 2, 1988, pp. 105-111.
- [16] Smialek, J. E. and Lambros, Z., "Investigation of Sudden Infant Deaths," *Pediatrician*, Vol. 15, No. 4, 1988, pp. 191-197.
- [17] Bass, M. and Hass, R., "SIDS and Homicide" (letter), *Pediatrics*, Vol. 92, No. 2, August 1993, pp. 302-303.
- [18] Case, M. E., "Critical Issues in Forensic Pathology," American Academy of Forensic Sciences, Colorado Springs, CO, December 1993.

Address requests for reprints or additional information to Joseph A. Prahlow, M.D.

Dept. of Pathology

Bowman Gray School of Medicine of Wake Forest University

Medical Center Boulevard

Winston-Salem, NC 27157-1072

Phone: (910) 716-4311

Fax: (910) 716-7595