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**Form** Public Record Request - Internal  
**Matter** MED - Board of Medical Examiners - Record Request  
**Sent** November 12, 2024 at 9:57 AM  
**Due**  
**Submitted** November 12, 2024 at 9:57 AM

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**Routine or Nonroutine?**

*Routine*

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**Has this request been responded to already?**

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**If no response yet, skip to General Information**

**Date you acknowledged the request**

**Date responsive documents sent to requester**

**General Request Information**

**Today's Date**

*11/12/2024*

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**Division**

*Employment Standards*

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**Date of Request**

*11/10/2024*

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**Date Request Received by DLI**

11/12/2024

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**Is the requester seeking their own personal information or records?**

No

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**Summarize the request, if received over the phone.**

*Subject: Public Records Request – Records Related to "Homicide by Unspecified Means," Dr. Michael A. Stier, Dr. Emma Lew, and Dr. Evan Matshes*  
*Dear Records Custodian,*  
*Pursuant to your state's applicable public records law, I am requesting access to and copies of specific records maintained by your office. This request pertains to the following categories:*

- 1. Records Pertaining to "Homicide by Unspecified Means":*  
*I am seeking any and all records, in both paper and electronic form, that reference "homicide by unspecified means" as a cause and/or manner of death. For your convenience, I have attached an article by Dr. Evan Matshes and Dr. Emma Lew, which discusses this classification. Please include any relevant documents, communications, case files, policy documentation, and any other records in which this classification has been referenced, utilized, or discussed.*
- 2. Records Related to Dr. Michael A. Stier, Dr. Emma Lew, and Dr. Evan Matshes:*  
*I am also requesting all records related to Dr. Michael A. Stier, Dr. Emma Lew, and Dr. Evan Matshes. Please include but do not limit to:*
  - o Complaints filed against these individuals,*
  - o Any investigations, disciplinary actions, or evaluations involving them,*
  - o Correspondence, reports, or communications that reference these individuals or their professional work.**Please include any complaints, investigations, evaluations, or other documentation related to these individuals in both paper and electronic formats. I request that any redactions be limited to information protected under applicable privacy laws.*  
*If possible, please provide these records electronically. I am willing to pay any standard fees associated with fulfilling this request; however, I would appreciate an estimate in advance if the total exceeds \$50. Please let me know if you anticipate any delays or have questions regarding the scope of my request. Thank you for your attention to this matter. I look forward to your prompt response.*  
*Sincerely,*  
*Emma.*

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**Contact Information Instructions**

1. For DLI employee, please enter solely First Name, Last Name, E-mail.
2. For Requester, please enter all information you have available.

**Notes and Comments**

**Notes--anything you want Legal to know about the request**

# Homicide by Unspecified Means

Evan W. Matshes, MD,\* and Emma O. Lew, MD†

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**Abstract:** The fundamental function of all North American systems of death investigation is to determine cause and manner of death. Modern teaching emphasizes the need to consider all investigative aspects including careful evaluation of the scene and circumstances, history, physical examination of the body, and ancillary laboratory studies, prior to death certification. This integrative approach to forensic pathology differs from an autopsy-focused practice whose function is to produce “anatomic” cause of death statements.

Some individuals die under suspicious circumstances and, despite thorough autopsy, have no anatomic cause of death. In Miami-Dade County, when the preponderance of evidence and investigative data suggest homicide despite the absence of an identifiable cause of death, “homicide by unspecified means” has been used as a summative cause of death statement. The records of the Miami-Dade County Medical Examiner Department were searched for this diagnosis, identifying 18 such cases between 1990 and 2004. The characteristics of these cases are discussed. Guidelines for the use of this diagnostic label are provided.

**Key Words:** homicide, forensic pathology, autopsy, cause of death, death certificate

(*Am J Forensic Med Pathol* 2010;31: 174–177)

Modern death investigation has been described as an integrative process requiring input from death scene evaluation, review of the terminal events and circumstantial/medical histories, physical examination of the body, toxicology, and ancillary laboratory tests.<sup>1,2</sup> The value of contributions from each of these areas will vary depending on the type of death being investigated. For example, considering the undisturbed scene of a 40-year-old man found dead in bed at home, diagnosed at autopsy with hypertensive intracerebral hemorrhage, a history of schizophrenia would add little diagnostic value. However, if a 40-year-old man dies after a violent struggle while in police custody and has a negative autopsy, the circumstantial, medical, and psychiatric histories are of paramount importance. From the strict perspective of the autopsy pathologist, this man has no anatomic (ie, structural) cause of death, but from the perspective of the death investigator, the functional nature of this man’s demise is supported by scene/circumstance, and psychiatric/medical history.

The same practical, integrative approach can be taken in some cases of suspicious death. Although most individuals who die with a homicidal manner of death do so under very obvious circumstances (eg, gunshot wounds), a smaller proportion of cases will be less straightforward, and therefore, more difficult and time-consuming to investigate. Consider the following hypothetical example: the decomposing body of a young woman is found in the trunk of a car in the woods. Her arms are bound at the wrists, and her legs are bound at the ankles, and duct tape covers her mouth, but not her

nose. A complete autopsy (including histology and toxicology) is negative. The differential diagnosis for cause of death in this circumstance is broad. Unfortunately, due to the limits of current medical science, identifying the actual cause of death is not possible in this case. Over the past several decades at the Miami-Dade County Medical Examiner Department (DCME), cases of this variety have been termed “homicide by unspecified means” (HUM).

Retired DCME Chief Medical Examiner Dr. Joseph H. Davis began using the diagnostic label HUM after a review of the International Classification of Diseases revisions 6, 7, 8, and 9.<sup>3–6</sup> Within these volumes, he hoped to identify nosologic phraseology suitable for cases wherein circumstances suggested homicide, but autopsy and laboratory findings indicative of cause of death were absent. He identified such a phrase in the 6th and 7th editions—ICD code E983.<sup>3,4</sup> This code, “assault by other means,” included “injuries inflicted by another person with intent to injure or kill, by any means, except those classifiable (in other specific categories), and by unspecified means.” In ICD-8 and 9, the code had been modified to E988—“injury by other and unspecified means, undetermined whether accidentally or purposely inflicted,” and included “injuries by any means, including unspecified means, except those classifiable (in other specific categories).”<sup>5,6</sup> In ICD-9, the descriptor “unspecified means” was singled out with the specific subcode E988.9. From this reading, and conservative literary license, the term HUM was brought into use at the DCME Department. In other jurisdictions, similar reasoning and experience have led to the use of this phraseology and other variants such as homicidal or unspecified violence.

## MATERIALS AND METHODS

The DCME Department was the source of data for this descriptive study. This database contains information on all cases falling under the jurisdiction of the DCME (as defined by Florida Statute 406). A search of the files over a 15-year period (1990–2004), showed that 48,810 cases were investigated by the DCME. To be included in this study, cases had a cause of death statement of either “homicide by unspecified means,” “violence by unspecified means,” “homicidal violence,” or “undetermined” with a manner of death of “homicide.” Twenty-four cases representing 18 individuals met inclusion criteria. The cause of death statement for 17 of these 18 individuals was listed as HUM; for one individual, it was listed as “homicidal violence.” The investigative history, autopsy report (including histology and toxicology), consultation reports, photographs, radiographs, documentation of rationale for classification, and death certificates were reviewed.

A Microsoft Access database was created, and data was collected in the following fields: age (years); sex (male/female/undetermined); race (white/black/Asian/Hispanic/other/undetermined); preservation of body (preserved/mild, moderate, severe decomposition/skeletonized); and relevant circumstantial, autopsy, toxicologic findings (free flow text).

## RESULTS

Twenty-four Medical Examiner case records, representing 18 individuals (some dismembered, with multiple case numbers representing one individual) over the 15-year study period met inclusion criteria (Table 1). This represents a DCME population prevalence of 0.04%. Fifteen of the 18 individuals were identified. Of those identified individuals, the average age at death was 37.8 years, with

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**TABLE 1.** Eighteen Cases Classified as "Homicide by Unspecified Means," Miami-Dade County Medical Examiner Department, 1990–2004

Case	Age (yr)	Sex	Race*	Preservation†	Positive Circumstantial, Autopsy and Toxicologic Findings
1	31	F	B	Decomp +	Found in trunk of car. Covered with blanket. Multiple superficial stab wounds to chest and face. Tox positive for cocaine and cocaine metabolites.
2	31	F	B	Decomp ++	Found inside closet. Corpse set on fire. Blood on clothing and doorknob linked by DNA to victim. Tox positive for cocaine metabolites.
3	39	F	B	Decomp +	Found in trunk of car, submerged in canal. Scalp contusions. Ecchymosis of right thyrohyoid membrane. Pleural effusions, pulmonary edema. Vaginal mucosal laceration.
4	U	M	W	Preserved	Five dismembered body parts wrapped in plastic bags, found in garbage bins, in 2 separate locations.
5	48	M	W	Decomp +++	Found in barrel under water with feet encased in concrete. Adipocere with focal skeletonization.
6	U	M	W	Decomp ++	Three 55 gallon drums found floating in ditch with dismembered remains of one man and one woman.
7	U	F	W	Decomp ++	Three 55 gallon drums found floating in ditch with dismembered remains of one man and one woman.
8	54	M	W	Decomp +++	Found off dirt road. Severe fragmentation of body with thermal artifact and decomposition.
9	26	F	W	Decomp +	Found floating in suitcase in open water. Abrasions to left scalp only.
10	48	F	W	Decomp ++	Found wrapped in tarp behind car in parking lot. Known prostitute/drug abuser. HIV+.
11	50	M	W	Decomp ++	Found in lake with ligature around neck. Rope placed around the neck, back, arms and ankles.
12	50	M	W	Skeletonized	Fragmented skeletonized remains found in trunk of car submerged in water. Cinder block on accelerator pedal.
13	18	M	B	Decomp +++	Found in heavy brush, bound with rope. Partially skeletonized.
14	37	F	B	Decomp ++	Found in wooded area decomposed with prominent thermal artifact. Soot in airways.
15	22	M	W	Skeletonized	Bones found in heavy brush on top of blanket and tarp. Trees for 100 feet around are burned. Head and hands are missing. Tool marks and other evidence of dismemberment on bones.
16	49	M	W	Skeletonized	Found skeletonized under board, wrapped in plastic sheet. Single acute rib fracture.
17	40	F	W	Decomp +	Found dead at home. Subgaleal hemorrhage of occipital scalp. Boyfriend seen going in and out of her apartment that same day on video camera. Blood smear on handle of pool cue nearby.
18	24	M	W	Decomp +++	Dismembered body parts washed up on the beach over several weeks. Adipocere and decomposition.

\*W, white; B, black; U, unknown.

†Decomp, decomposition. Mild (+), moderate (++), severe (+++).

a standard deviation of 11.8 years. The age range was 18 to 54 years with a median age of 39 years. Of the 18 distinct individuals, 8 were female and 10 were male.

One body was noted to be preserved with no evidence of putrefactive decomposition (5.6%). Seventeen of the bodies were noted to have some evidence of putrefactive decomposition (94.4%): 4 were described as mildly decomposed (22.2%), 6 were moderately decomposed (33.3%), and 4 were severely decomposed (22.2%). Three cases were totally skeletonized (16.7%).

Seventeen of the bodies (or their corresponding dismembered body parts) were hidden in some fashion (94.4%). This included 8 cases where the body was found in water (44.4%). The bodies of 2 individuals were found in their homes (11.1%); one of them was placed in a closet. In 4 cases there were attempts to destroy evidence (the body and/or the scene) by fire (22.2%). There was postmortem dismemberment of 5 bodies (27.8%).

Physical examination of the body (autopsy, radiology, histology) did not reveal an anatomic cause of death in any of the cases. Four cases had minor injuries that were not capable of causing death. These

injuries included superficial stab wounds to the face and chest, ecchymoses of the right thyrohyoid membrane, abrasions of the left scalp, and a small subgaleal hemorrhage of the occipital scalp. Toxicology screen was positive in one case (5.6%) for cocaine and its metabolites. In this same case, the body was found covered with a blanket in the trunk of a car, with superficial stab wounds to the face and chest.

## DISCUSSION

Fundamental to the HUM label is the concept that the determination of a homicidal manner of death does not require an anatomic cause of death—it is a history and circumstance-derived deductive diagnosis. In these cases, thorough studies of the body do not provide a cause of death, however, the totality of medical and law enforcement evidence denotes homicide. Rather than embarking down the dangerous path of cause of death confabulation, for example, using specific diagnoses like "suffocation" argued as "diagnoses of exclusion," the HUM descriptor (and variations such as "homicidal violence") serves as a useful summative statement for the totality of

investigative efforts. Furthermore, such a concise statement allows nosologists to uniformly code deaths of this variety.

Great care and consideration should be taken in making the diagnosis of HUM, and only after all scientifically sound efforts have been undertaken to identify a cause of death. When the search for a more traditional anatomic (structural) or pathophysiologic (functional) diagnosis has been exhausted, and the HUM label is being considered, it is prudent for medical examiners to evaluate and identify at least 5 key features (see diagnostic criteria below). When all of these features are not present, it is more advisable to render cause and manner of death statements of ‘undetermined.’

**Diagnostic Criteria for the HUM Diagnosis**

In an effort to enhance diagnostic uniformity, we propose a series of criteria (Table 2) as a guide for complex death investigations with circumstances similar to those described in Table 1.

**Criterion 1: Objectively Suspicious Circumstances of Death**

First and foremost, there must be “objectively” suspicious circumstances surrounding the death. Objective findings include evidence of deliberate attempts to hide the body, or to conceal evidence (such as by burning, cleaning, or dismemberment). It also includes those cases wherein the state of preservation of the body is poor (eg, decomposition, thermal artifact, etc.), but the presence of blood at the scene, preferably matched to the victim via DNA analysis, is suggestive of significant antemortem trauma. Alternatively, forensic pathologists may identify nonlethal injuries that, in the context of other suspicious features, are felt to be compatible with the HUM label. In the absence of injuries, the discovery of a body restrained by device, or by the confines of a restrictive environment (eg, car trunk), in the context of other investigative features (see below), may be appropriately labeled HUM.

**Criterion 2: No Anatomic Cause of Death**

Also fundamental to this label is the absence of identifiable lethal natural disease and trauma. When potentially lethal findings are identified, it is important for medical examiners to consider those lesions identified at autopsy within the context of the whole case—that is, did the individual “die with” or “die of” a given pathologic entity. An important example is the discovery of potentially lethal atherosclerotic and/or hypertensive cardiovascular disease. When someone is found dead under objectively suspicious circumstances, heart disease may be the cause of death; alternatively, it may be only contributory or entirely coincidental. Especially with respect to heart disease, medical examiners need to consider and rule out, where appropriate, the “homicide by heart attack” concept proposed in 1978 by Davis,<sup>7</sup> and later revised by Turner et al.<sup>8</sup> For example, an elderly man found dead in his ransacked home, bound to a chair by duct tape around his wrists, has a 650 g heart at autopsy. There is no trauma to the body. Although the circumstances are objectively suspicious, a HUM diagnosis is less appropriate given a plausible alternative cause of death (homicide by heart attack) as suggested by the scene circumstances.

When dismembered body parts are found, the first determination must be whether those remains indicate that death has occurred. For example, the discovery of a head clearly denotes death. But, the discovery of a limb or fingers, are consistent with accidental loss of an appendage, or inappropriate disposal of medical specimens.

**Criterion 3: No Toxicologic Cause of Death**

When toxicologic analysis reveals the presence of drugs in concentrations capable of causing death, great caution must be taken when applying the HUM label. Medical examiners must be cognizant that in such circumstances, the totality of evidence could also be consistent with the dumping or illegal disposal of the body of an

**TABLE 2. Diagnostic Criteria for Homicide by Unspecified Means (At Least One Point From Each of the Below 5 Categories Must Be Present)**

1. Objectively suspicious circumstances of death.
  - A. Body deliberately hidden from view.
    - a. Buried.
    - b. Covered with tarps, boards, brush, etc.
    - c. Located in suitcase, car trunk, etc.
    - d. Located in heavy brush, forest, etc.
    - e. Located (submerged or floating) in a body of water.
  - B. Attempt to conceal evidence.
    - a. Scene/body burned.
    - b. Scene/body cleaned (eg bleach).
    - c. Postmortem dismemberment (attempted or “complete”).
  - C. Scene findings suggestive of antemortem injury not verifiable by autopsy (eg body markedly decomposed, skeletonized, or burned).
    - a. Blood at the scene suggestive of blunt, sharp, penetrating/perforating injury (DNA match of blood to victim preferable).
  - D. Nonlethal injuries present on the body.
  - E. Evidence of physical restraint.
2. No anatomic cause of death.
  - A. A complete autopsy has ruled out fatal natural disease and fatal trauma.
  - B. There are no significant injuries, but the poor preservation of the body prevents definitive exclusion of death due to disease or injury.
  - C. The presence of a limited number of body parts (eg, in postmortem dismemberment) prevents cause of death determination.
    - a. A significant quantity of remains or vital organs should be present to determine that death has occurred.
3. No toxicologic cause of death.
  - A. Toxicologic analysis is negative for substances typically capable of causing death.
  - B. Toxicologic analysis is positive, but not in quantities that are sufficient to cause death.
4. No environmental, circumstantial or historical causes of death.
  - A. No evidence of a hostile environment (eg, hypo- or hyperthermia, exposure to toxic chemicals, low-oxygen environment, carbon monoxide, etc).
  - B. Body position and circumstances are not suggestive of positional, traumatic or mechanical asphyxia.
  - C. No historical suggestion of an acutely altered physiologic or mental state, or chronic, potentially fatal medical condition. Examples of such include, but should not be limited to:
    - a. Agitated/excited delirium, psychotic illness.
    - b. Poorly controlled endocrinopathy such as diabetes mellitus.
    - c. Previously documented seizure disorder/epilepsy.
    - d. Previously documented cardiac electrophysiologic disorder.
    - e. “Homicide by heart attack.”
    - f. Commotio cordis.
5. A more specific cause of death cannot be suggested by the dataset.

individual who has died accidentally or intentionally from excessive medications or illicit drug use. However, if the totality of evidence suggests that the presence of a drug, or its metabolites is noncontributory to death (eg, Case 1 of Table 1), HUM may be an appropriate diagnosis.

**Criterion 4: No Environmental, Circumstantial, or Historical Causes of Death**

Medical examiners must consider the possibility of “scene dependent” diagnoses. Examples include, but are not limited to exposure to extreme heat or cold, toxic chemicals, low-oxygen

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environments, and carbon monoxide. Furthermore, the position of the body should be observed and documented to rule out the possibility of positional or mechanical/traumatic asphyxia.

To use the HUM diagnosis, identifiable pathophysiologic (functional) causes of death should be excluded. It is particularly important to rule out acutely altered physiologic or mental states like agitated/excited delirium, the effects of psychotic illness, or a documented history of seizure disorder or cardiac electrophysiologic disturbance.

**Criterion 5: A More Specific Cause of Death Cannot Be Suggested by the Dataset**

These criteria are not all inclusive. To promote appropriate classification of deaths within the HUM category, medical examiners must consider all other potentially relevant data to ensure that an alternative cause of death is not possible.

**What Is Not HUM?**

Infants, young children, and the elderly may die under circumstances that could be appropriately labeled as HUM. But at these extremes of age, an effort should be made to consider other more appropriate diagnoses. The HUM label is not meant to be applied to the apparently abandoned fetus/neonate, or the apparently normal infant dying with a few rib fractures (or other seemingly “nonlethal” injuries). In the elderly, delirium, dementia, or confusion of any etiology may lead to accidental or self-inflicted nonlethal injuries, and a variant of the “hide-and-die syndrome”<sup>9</sup> often attributed to individuals dying from hypothermia. Thus, it would be wrong to classify the death of an elderly person found hidden, with nonlethal injuries, and no anatomic, toxicologic, environmental, circumstantial or historical cause of death, as HUM (unless of course they are buried, or found in suitcases and other similar units closed from the outside).

Some individuals who die while being restrained in police custody may appear to fit the criteria for a HUM label, but circumstances and autopsy/toxicology findings may support other causes of death such as restraint asphyxia, agitated/excited delirium, etc.

The occasional medical examiner may claim that he/she can identify homicide cases without objective findings, based on an instinctive drive. One of the classic mistakes in forensic pathology is “substituting intuition for scientifically defensible interpretation.”<sup>10</sup> The diagnostic criteria for HUM are created to demand an investigative rationale for using this designation as opposed to basing the determination on one’s intuition that this is a homicide.

**Variations on a Theme**

In some jurisdictions, the HUM concept is used in a slightly modified fashion to include those cases where physical injury is identified, but as a result of factors such as decomposition, the significance of those injuries cannot be determined. This may indicate one of 2 things: (1) injuries are identified, but the role they play in causing death is not known; (2) due to the poor preservation of the body, it is not possible to rule out additional ante/perimortem trauma. In such circumstances, the cause of death is given as “homicidal violence including X.” For example, the cause of death statement for a loosely wrapped, decomposing naked body with blunt chest trauma, in a condemned building, may be “homicidal violence including blunt chest trauma.”

**CONCLUSION**

The practice of modern forensic pathology requires more than the performance of autopsies. A death investigation service that relies primarily or solely on the autopsy may be unable to certify complex

cases when no anatomic or toxicologic cause of death is found; under these circumstances, a death may be labeled undetermined or unascertained.<sup>11</sup> Given the hypothetical example of a decomposing young woman, handcuffed and disposed of in a duffel bag, with no anatomic (or toxicologic) cause of death at autopsy, it would be accurate, ethical and responsible to state that the mechanics of death are not known. Yet, the preponderance of evidence, including especially the objectively suspicious circumstances under which the body was found, and the elimination of anatomic, toxicologic, circumstantial, and other causes of death, strongly supports that death occurred at the hands of another. In accordance with current principles of death investigation, which involve integration of information from the medical and other history, terminal events, scene circumstances, autopsy, toxicologic analyses, additional pertinent ancillary studies, and law enforcement investigation, once these avenues have been exhausted, it is then accurate, ethical and responsible to certify such a death as “homicide by unspecified means.” Remember that the manner and even cause of death may change if new information or evidence becomes available. A thorough, comprehensive approach to death investigation ensures the most accurate certification feasible for most of deaths, based upon the preponderance of evidence. The HUM certification is reserved for those relatively uncommon cases where the preponderance of evidence indicates a homicide, but a specific cause of death is not identified after all reasonable efforts. We propose a set of criteria which will help promote more uniform classification of HUM cases, taking into consideration all facets of the death investigation process.

**ACKNOWLEDGMENTS**

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