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Death Investigation Report Forms (DIRFs): Generic Forms for Investigators (IDIRFs) and Certifiers (CDIRFs)

REFERENCE: Hanzlick, R. and Parrish, R. G., **"Death Investigation Report Forms (DIRFs): Generic Forms for Investigators (IDIRFs) and Certifiers (CDIRFs),"** *Journal of Forensic Sciences*, JFSCA, Vol. 39, No. 3, May 1994, pp. 629–636.

ABSTRACT: On the basis of data collection procedures and forms used in various death investigation offices, we developed generic death investigation report forms (DIRFs). One form was designed for documenting information collected by the initial investigator of death, and another form was designed for documenting information collected by the medical examiner, pathologist, or other person who certifies the death or otherwise finalizes the investigation by determining the cause, manner, and circumstances of death. The benefits, problems, and criteria associated with designing the forms are discussed. Both the investigators DIRF (IDIRF) and the certifier's DIRF (CDIRF) are available in printed or electronic form for those who wish to use them or to modify them according to their specific needs. We hope that these DIRFs will be useful and promote uniformity in documenting death investigations.

KEYWORDS: forensic science, forms, mortality data, death investigation, death investigation data

Medical examiner and coroner offices vary in the ways they collect death investigation information. Some offices rely on free-form, handwritten or typed reports, and others use standard forms that range from basic to extensive check lists. As a result, the quality, quantity, and format of information collected varies. To promote greater uniformity in documenting death investigations, we developed generic death investigation report forms (DIRF) for those who are trying to design suitable forms for their offices.

Methods

We developed two death investigation forms—one for investigators or persons who perform the initial death investigation, and another for certifiers (those who "sign out," "close," or "finalize" the investigation). DIRFs were designed to document basic, but

Received for publication 1 July 1993; accepted for publication 22 Sept. 1993.
Presented at the Annual Meeting of The American Academy of Forensic Sciences, Boston, Massachusetts, February 1993.
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important information collected during death investigations, rather than to document all information that may be of any conceivable use to death investigators or researchers. We based our design of DIRFs on the forms and data collection procedures of many death investigation offices. These are the specific criteria we used:

1) Forms should be useable in offices in which an initial investigation is conducted by an agency or person other than the agency or person that finalizes or otherwise closes the investigation.

2) Forms should be generic and contain space for information that most offices gather routinely.

3) Forms should contain space for basic information that may be available either when the death is first reported or when the case is finalized; such information will usually not change or require updating.

4) Forms should contain space for items that can be completed easily from memory or on the basis of other documents or notes, and they should have space for adding information as the investigation proceeds.

5) Investigator's forms (IDIRFs) should allow investigators to provide ample information to the certifier so that the certifier can determine the most appropriate approaches to the case.

6) Certifier forms (CDIRFs) should contain space for writing the cause and manner of death as determined by the certifier, as well as space for classifying and coding the cause, manner, and circumstances of death. Ideally, the death should be classified after all available information has been gathered and analyzed and the case is finalized by the certifier.

7) Forms should be easy to complete in handwriting.

8) Forms should be easy to reproduce by photocopying, or to scan into a computer, or to transmit by Fax; the forms should be legible on a computer screen or printout if they have been entered with a scanner.

9) Certain items on the forms should contain default codes in order to facilitate electronic data storage.

10) Each form should fit on standard 8.5″ × 11″ paper.

The IDIRF (Figs. 1 and 2) and the CDIRF (Figs. 3 and 4) are each printed on both sides of one sheet of paper.

Discussion

Standard forms offer several advantages: (1) they can serve as guidelines for investigations; (2) they ensure that certain items of information are collected consistently and that documentation is thorough; (3) they facilitate a quick visual review of information because each item is recorded in the same location in every case record; (4) they facilitate electronic storage of information by providing information to computer operators in a consistent order; and (5) they allow information to be entered into electronic data bases by one of several methods: (a) scanning the completed form into a computer; (b) hand-keying information from the form into a computer; or (c) completing the blank form directly on certain notepad computers.

Standard forms also have disadvantages: (1) if completed at the death scene, forms can be contaminated with unsanitary substances; (2) information is not always collected in the same sequence as it is requested on the form; (3) if mistakes or changes are crossed out and rewritten, the forms may become illegible or less useful; (4) extensive checklists are tedious to complete; (5) persons using a laptop or notepad computer to complete forms should be able to type; and, (6) laptop and notepad computers can be expensive or cumbersome, or both.

DEATH INVESTIGATION REPORT **Case Number**_____
Investigator's Form (IDIRF)

Decedent's Name_____
FIRST MIDDLE LAST

Medical Examiner's Office

Decedent: Age_____ **Race**____ **Sex** ____ **Ethnicity**_____ **DOB**_____ **SS#**_____

Home Address _____
Street # Street Name City County State Zip

Police Complaint Number_____ **Police Department**_____

DESCRIPTION OF CIRCUMSTANCES: (Include **how** the incident is thought to have occurred, decedent's **activity** at the time of the incident, the **type of place**, and the **sequence of events**). If extra pages are used, indicate number here: _____

Death Place >>> ___On Scene(S) ___Enroute/DOA(D) ___Emerg Rm(E) ___In Surgery(O) ___Inpatient(I)

Concerning the onset of fatal events >>>>> ___Witness present (W) OR ___No witnesses known (N)
___At c n residence (H) OR ___Not at own residence (A)
___Indoors (I) OR ___Out-of-doors (O)

Place of onset of the fatal events >>>> __In vehicle (V) ___On job (J)
Describe TYPE OF PLACE:

ACTION	DATE	TIME	LOCATION/ADDRESS	BY WHOM (PERSON OR AGENCY)
ME notified			Not applicable	
Found dead				
Found down				
Known alive				
Fatal Injury				Not applicable
At hospital				Taken by:
Death				Not applicable
Pronounced				
Scene visit				Photos?
NOK notified			Person:	

Case disposition:>>>>> ___**CASE DECLINED** (D) due to OR ___**CASE ACCEPTED** (X) for
___Topic (T) ___Locale (L) ___Autopsy(A) ___Inspection(I) ___Certification(C)

Who will sign DC? >>>

Body disposition:>>> ___Brought in for exam (E) ___Brought in for holding/claim (C) ___Released from site(R)

Transport agency:>>>

Injured, not dead: # Companion deaths: Companion Case Numbers:

Investigator and affiliation: Date:

FIG. 1—*Side 1 of Investigator's Death Investigation Report Form (IDIRF). This form is completed by the person conducting the initial stages of the death report and investigation. Note optional single character codes that can be used for electronic data storage for some data items.*

Occupation and employment status>>>	Occupation or Job Title >>>>>>> Industry or kind of business>>> Employment Status >>> ___Currently employed(E) ___Self-employed(S) ___Not employed(N)

Primary physician's name & phone >>>>	

Medical history >>>>	___Not investigated(I) ___Unknown(U) ___No past problems(N) ___Medical problems(M)

Medical informant >>>	___Physician(P) ___Med Records(M) ___Health Provider(H) ___Family(F) ___Other(O)

Type of disorder	Yes	No	Specify, clarify, or comment
A) High blood pressure			
B) Heart Disease (myocardial infarction, CHF etc)			
C) Lung Disease (emphysema, asthma etc)			
D) GI Disease (ulcers, hepatitis, cirrhosis etc)			
E) Nerve System (dementia, depression, strokes etc)			
F) Substance use (alcohol, drugs, smoker etc)			
G) HIV infection			
H) Cancer or other malignancy			
I) Terminal illness			
J) Pregnant within previous 90 days			
K) Seizures (specify if due to injury, alcohol,other)			
L) Recent/old serious injury (describe)			
M) Long term effects of a previous injury (specify)			
N) Allergic reaction (specify)			
O) Other condition not in this list (specify)			

Medication history >>>	___Not investigated (I) ___Unknown (U) ___Prescription meds (P) ___Over-the-counter (O)

Drug Names (dosage, Rx number, Rx date, pharmacy, pill count, if needed): If extra pages needed, write number here:___

AGONAL MEDICAL TREATMENT >>>	___None (N) ___CPR (R) ___Transfusion (T) ___IV fluids (F) ___Surgery (S)

Describe (a) dates and reasons for any surgery during final hospitalization or for surgery performed at any time for conditions that led to death, (b) injuries or conditions documented at hospital, (c) known or suspected complications of anesthesia or medical procedures, (d) other comments.

FIG. 2—*Side 2 of Investigator's Death Investigation Report Form (IDIRF). This form is completed by the person conducting the initial stages of the death report and investigation. Note optional single character codes that can be used for electronic data storage for some data items.*

DEATH INVESTIGATION REPORT **Case Number**_____
Certifier's Form (CDIRF)

Decedent's Name_____
FIRST MIDDLE LAST

Medical Examiner's Office

EXAM PROCEDURE			
Date:		A	Autopsy (head, neck and thoracoabdominal dissection)
Time:		L	Autopsy, limited: Describe> >
By:		E	External inspection; no dissection
Exam#:		C	Certification of "sign-out" only; no examination of body at morgue
		R	Review of case; confirm case as jurisdiction declined (will not certify)

PROCEDURES			
		S	Scene inspection by certifier or M.E.
		H	Histology
		P	Photos of examination
		X	X-rays or other imaging studies
		A	Alcohol determination (blood or other specimen)
		T	Toxicology screen (blood or other specimen)
		M	Cultures/microbiology
CERTIFICATION		L	Chemistries/clinical Lab Tests
PENDING:_____		D	Other: (consults etc) specify> > >

NOTE: DO NOT COMPLETE THE REST OF THIS FORM UNTIL DEATH IS CERTIFIED OR CASE IS FINALIZED

CAUSE OF DEATH	Duration (Opt)
Immediate:	
due to:	
due to:	
due to:	
Other Significant Conditions:	

MANNER OF DEATH	__Homicide(H) __Suicide(S) __Accident(A) __Natural(N) __Undetermined(U)

IF INJURY CAUSED OR CONTRIBUTED TO DEATH	INJURY DATE:	TIME:
How did injury occur:		
Type of place where injury occurred:		
Injury address:		

Street# Street Name City County State ZIP

Actual Date/Time of Death (Circle if "approx" or "found")>>>>>	DATE:	TIME:
Death Certified by:	DATE:	TIME:
Title of Certifier:		

FIG. 3—*Side 1 of Certifier's Death Investigation Report Form (CDIRF). This form is completed by the person who determines the cause, manner, and circumstances of death, or who otherwise closes or finalizes the investigation. Note optional single character codes that can be used for electronic data storage for some data items.*

NOTE: DO NOT COMPLETE ITEMS ON THIS PAGE UNTIL THE CASE IS BEING CERTIFIED (OR FINALIZED)

ADDITIONAL QUESTIONS RELATED TO CERTIFICATION	YES (Y)	NO (N)	UNKNOWN (U)
Was an autopsy performed anywhere else?			
Were autopsy findings used to ascribe cause or manner of death?			
Did the events leading to death occur while the person was at work?			
Does the death meet the NIOSH guidelines for "injury at work"?			
Was surgery performed within 30 days of death?			

If Surgery performed > DATE: REASON:

ETHANOL ___N/A	Specimen:	Concentration/Units:
DRUG SCREEN ___N/A	___Positive Screen (P)	___Negative Screen (N)

Specific Drug Results (specimen, substance, concentration; include negatives if possible):

Are concentrations representative of those at the time of the incident that led to death? ___Yes ___No ___?

Write key words (preferably, more than one word in each category) for features of decedent, place, and circumstances that might assist in categorizing the death or indicating unique features of the death.

EXAMPLE: Person: inmate, prisoner Place: jail, city prison Circumstances: in-custody hanging with shoestring

PERSON > >	
PLACE > >	
CIRCUMSTANCES > > Include weapon if known	

CHECK IF CASE IS REPORTABLE TO ANY OF THESE AGENCIES; INDICATE DATE REPORTED

		Agency	Report Date			Agency	Report Date
	A	Local health department			F	FDA-Food	
	B	Child fatality review panel			G	FDA-Drug	
	C	NHTSA (FARS)			H	FDA-Medical Device	
	D	NIDA (DAWN)			I	OSHA	
	E	CPSC (MECAP)			J	OTHER > >	

ADDITIONAL COMMENTS:

FIG. 4—*Side 2 of Certifier's Death Investigation Report Form (CDIRF). This form is completed by the person who determines the cause, manner, and circumstances of death, or who otherwise closes or finalizes the investigation. Note optional single character codes that can be used for electronic data storage.*

We also considered the physical aspects of the DIRFs. If many forms are required for case documentation, information may become fragmented or misfiled. If the forms are in a booklet, they are difficult to photocopy, Fax, or produce in such a way that pressure-sensitive copies can be made. If the forms consist of single sheets, space for information may be inadequate, requiring a small type size to accommodate all information and making that information more difficult to read. If information is entered into a computer without a handwritten original, data can be altered too easily, and sometimes, no one can tell who made the changes or when they were made.

These factors point out that forms take time and thought to develop. The designer must identify specific investigative and administrative needs, yet remain practical. The definition of items is required and their anticipated length must be known in order to appropriately designate space on the form. The needs of clerical assistants must be considered, as must the needs of potential users such as the public or law enforcement or legal personnel. Confidentiality issues must also be addressed. Imagine the ramifications, for example, of indicating on a checklist that a decedent was a prostitute and learning later that the indication was wrong. Forms must be designed that allow appropriate information to be collected in a manner that is relevantly truthful without demeaning the decedent. All of these issues must be addressed. The variety in the ways medical examiner and coroner offices have addressed these issues explains why the design of forms and the way they are used varies so much from office to office.

We have made no attempt to provide space for specialized information on the DIRFs, for example, information that might be required in suspected cases of electrocution or sudden infant death syndrome. Although guidelines for investigating these and other types of death are available, specific forms have not been published in most instances [*1–4*]. We hope that eventually generic forms for such investigations will be developed for use with DIRFs.

The DIRFs have minimal space for extraneous comments. We know that narrative style and length vary, but understand that, when necessary, lengthy narratives or other reports (for example, police reports or traffic accident summaries) can be attached to the DIRFs.

Although the IDIRF and the CDIRF include some codes that can be used for electronic data storage, we do not, in general, recommend the use of codes in lieu of words or text, particularly in regard to the cause of death, the narrative description of circumstances surrounding death, toxicology results, and key words used to classify or note distinctive characteristics about the circumstances of death. Codes are useful for some standard information items, such as a single letter code for manner of death or for certain procedures that were conducted during the investigation.

The data items on the IDIRF and the CDIRF correspond closely to the data items in a generic, death investigation data base called DIDS (Death Investigation Data Set) that we have developed in conjunction with representatives from the American Academy of Forensic Sciences and the National Association of Medical Examiners [*5*].

There are no right or wrong forms, but there are probably well designed, average, and poorly designed forms. When designing the IDIRF and the CDIRF, we tried to consider all the factors we have discussed. We hope that the forms will be useful to persons who are trying to develop or redesign their office forms. Persons interested in DIRFs may contact us at the Centers for Disease Control and Prevention for a printed or electronic version. Either form can be modified to meet office needs. We welcome comments, suggestions, and constructive criticisms of the forms.

References

[*1*] Jones, A. M. and Weston, J. T., "The Examination of the Sudden Infant Death Syndrome Infant: Investigative and Autopsy Protocols," *Journal of Forensic Sciences*, Vol. 21, No. 4, 1976, pp. 833–841.

[2] Froede, R. C., Ed., *Handbook of Forensic Pathology*, College of American Pathologists, Northfield, IL, 1990.
[3] Lipskin, B. A. and Field, K. S., Eds., *Death Investigation and Examination: Medicolegal Guidelines and Checklists*, The Forensic Sciences Foundation Press, Colorado Springs, CO, 1984.
[4] Bell, J. S., Ed., *Standards for Inspection and Accreditation of a Modern Medicolegal Investigative System*, National Association of Medical Examiners, St. Louis, MO, 1988.
[5] Parrish, R. G., Ing, R. T., and Hanzlick, R., "Death Investigation Data Set (DIDS)—A Uniform Format for Gathering Data," Presented at the 45th Annual Meeting, American Academy of Forensic Sciences, Boston, MA, February 19, 1993.

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