Forensic Technology
CENTER OF EXCELLENCE
A program of the National Institute of Justice

These graphics show the elements that should be considered and reported with suspected substance related, drowning, falls, firearms, and SUID cases.

Frequently Used Data Elements Collection Systems and Primary Documentation

This measles chart is intended to provide a graphical representation of government systems that collect similar death investigation data elements. The X axis represents five mortality collection systems, and the Y axis represents the frequently used data elements put together by the MDI-Data-WG. Layered on top of this information are sections of color that correspond to the primary documentation in the upper left-corner of where that information may typically come from (i.e., primary documentation source).

Medicolegal Death Investigations:
Case-Specific Data Elements Captured in Federal Mortality Data Systems

Primary Documentation

- Decedent
- Scene(s)
- Witness Reports
- Documentation/Records
- Output of the MEC Investigation
- ✲ For a delayed death, this information may only be available via Documentation/Records.

Medicolegal Death Investigation Core Data Elements

	US Standard Death Certificate	National Violent Death Reporting System (NVDRS)	State Unintentional Drug Overdose Reporting System (SUDORS)	National Fatality Review-Case Reporting System (NFR-CRS)	National Missing and Unidentified Persons System (NamUs - Unidentified and Unclaimed)	National Forensic Laboratory Information System Medical Examiner and Coroner Offices (NFLIS-MEC)
Demographic						
Name	●	●	●	●	●	
Age	●	●	●	●	●	●
Age Unit	●	●	●	●	●	●
Date of Birth	●	●	●	●	●	
Sex	●	●	●	●	●	
Race	●	●	●	●	●	
Ethnicity	●	●	●	●	●	
Social Security Number	●	●				
Marital Status	●		●			
Next of Kin	●			●	●	
Occupation	●	●	●		●	
Putative Name					●	
Location						
Name and address where found dead, unconscious, or in distress		●✲	●✲		●✲	
Type of place where injury occurred	●✲	●✲	●✲	●✲	●✲	
Certified street address of injury	●✲	●	●		●	●✲
Decedent's residence – details	●	●	●	●	●	
Type of Residence		●	●	●	●	
Scene investigation address		●			●	
Decedent's address	●	●		●	●	
Categorization of place of death	●✲	●✲	●✲	●✲	●✲	
Name of place where death was pronounced	●	●	●		●	●
Address of place where death was pronounced	●	●	●		●	●
Type of place where death was pronounced	●✲	●✲			●✲	
Place last known alive				●✲	●✲	
Name of hospital where decedent was first taken		●			●✲	

Medicolegal Death Investigations:
Case-Specific Data Elements Captured in Federal Mortality Data Systems

Primary Documentation

- Decedent
- Scene(s)
- Witness Reports
- Documentation/Records
- Output of the MEC Investigation
- ✱ For a delayed death, this information may only be available via Documentation/Records.

Marker key used in table below: De = Decedent, Sc = Scene(s), Wi = Witness Reports, Do = Documentation/Records, Ou = Output of the MEC Investigation, ✱ = delayed-death note.

Data Element	US Standard Death Certificate	National Violent Death Reporting System (NVDRS)	State Unintentional Drug Overdose Reporting System (SUDORS)	National Fatality Review-Case Reporting System (NFR-CRS)	National Missing and Unidentified Persons System (NamUs - Unidentified and Unclaimed)	National Forensic Laboratory Information System Medical Examiner and Coroner Offices (NFLIS-MEC)
Circumstances						
Cause-specific information		De/Sc/Wi✱	De/Sc/Wi✱	Sc/Wi	De/Sc	
Safety issues		Sc/Wi✱	Sc/Wi✱	Sc/Wi✱		
Social history		Do/Wi	Do/Wi	Do/Wi	Do/Wi	
OSHA injury	Sc/Do	Sc/Do				
Who last knew decedent to be alive		Wi✱			Wi✱	
Number of other persons known to be dead from same incident		De/Sc/Do		Sc/Wi	De/Do	
Who found the decedent		Wi✱			Wi✱	
Deaths associated with legal intervention	Sc/Wi	Sc/Wi✱	Sc		Sc/Wi	
Informants/witnesses		Wi✱	Wi✱	Wi✱		
Events leading to death occurred while decedent was working		Sc✱		Sc/Wi✱		
How decedent was last known to be alive			Wi✱	Wi✱	Wi✱	
Potential referrals		Ou		Ou		
Drugs found at scene		Sc/Wi✱	Sc/Wi✱	Sc/Wi✱	Sc/Wi✱	
Date and Time						
Case reviews				Ou		Ou
Date and time death was pronounced	De/Ou/Wi	De/Ou/Wi	De/Ou/Do		De/Ou/Wi	
Qualification of date of death	De/Do/Wi	De/Do/Wi			De/Do/Wi	
Certified date and time of death	Ou/Do/Wi	Ou/Do/Wi	Ou/Wi	Ou/Do/Wi	Ou/Do/Wi	Ou/Do/Wi
Certified time of injury	Ou/Do/Wi	Ou/Do/Wi	Ou/Wi			
Year by which case is categorized						
Date death reported to MEC	Ou	Ou		Ou	Ou	
Date and time found dead		Wi✱	Wi✱	Wi✱	Wi✱	
Dates of all examinations, inspections, and/or case reviews, and by whom		Wi✱		Wi✱		
Date and time of injury/onset of events leading to death	Wi✱	Wi✱		Wi✱	Wi✱	Wi✱
Qualification of injury date		Wi✱				
Date and time last known alive		Wi✱	Wi✱		Wi✱	
Date and time decedent arrived at hospital		Do			Do	

Medicolegal Death Investigations:
Case-Specific Data Elements Captured in Federal Mortality Data Systems

Primary Documentation
- ● Decedent
- ● Scene(s)
- ● Witness Reports
- ● Documentation/Records
- ● Output of the MEC Investigation
- ✱ For a delayed death, this information may only be available via Documentation/Records.

Data Element	US Standard Death Certificate	National Violent Death Reporting System (NVDRS)	State Unintentional Drug Overdose Reporting System (SUDORS)	National Fatality Review-Case Reporting System (NFR-CRS)	National Missing and Unidentified Persons System (NamUs - Unidentified and Unclaimed)	National Forensic Laboratory Information System Medical Examiner and Coroner Offices (NFLIS-MEC)
Narrative						
Narrative description of circumstances	Witness Reports ✱	Witness Reports ✱	Witness Reports ✱	Witness Reports ✱	Witness Reports ✱	
Medical History						
Pregnancy history	Decedent/Documentation	Decedent/Output	Decedent/Output	Decedent/Documentation	Decedent/Documentation	
Medical history		Witness/Documentation	Witness/Documentation	Witness/Documentation		
Decedent's physicians or health providers						
Type of agonal treatment or therapy			Witness/Documentation			
Recent trauma		Decedent/Witness		Decedent/Witness	Decedent/Witness	
Family medical history		Witness/Documentation		Witness/Documentation		
Procedures performed		Documentation		Documentation	Documentation	
Prescriptions		Scene/Documentation	Scene/Documentation	Scene/Documentation		
Exam/Autopsy						
Specific autopsy findings – autopsy report		Output/Decedent	Output/Decedent	Output/Decedent	Output/Decedent	
Organ weights						
Ancillary procedures performed				Output		
Limited autopsy	Output	Output	Output	Output		Output
Toxicology						
Toxicology results		Output	Output	Output	Output	Output
Specific tox tests performed		Output		Output		
Toxicology samples		Output/Documentation				
Cause & Manner						
Cause of Death (lines 1-4)	Output/Witness/Documentation	Output/Witness/Documentation	Output/Witness/Documentation	Output/Witness/Documentation	Output/Witness/Documentation	Output/Witness/Documentation
Other significant conditions	Output/Witness/Documentation	Output/Witness/Documentation	Output/Witness/Documentation	Output/Witness/Documentation		Output/Witness/Documentation
Manner of death	Output	Output	Output	Output	Output	Output
Duration of condition of cause of death (lines 1-4)	Output/Witness/Documentation	Output/Witness/Documentation	Output/Witness/Documentation	Output/Witness/Documentation		
Certified explanation of how injury occurred	Output/Witness/Documentation	Output/Witness/Documentation	Output/Witness/Documentation	Output/Witness/Documentation		

Primary Documentation

- ● Decedent
- ● Scene(s)
- ● Witness Reports
- ● Documentation/Records
- ● Output of the MEC Investigation

✱ *For a delayed death, this information may only be available via Documentation/Records.*

Medicolegal Death Investigations:
Case-Specific Data Elements Captured in Federal Mortality Data Systems

Case Specific	US Standard Death Certificate	National Violent Death Reporting System (NVDRS)	State Unintentional Drug Overdose Reporting System (SUDORS)	National Fatality Review-Case Reporting System (NFR-CRS)	National Missing and Unidentified Persons System (NamUs - Unidentified and Unclaimed)	National Forensic Laboratory Information System Medical Examiner and Coroner Offices (NFLIS-MEC)
Suspected Substance-Related Elements		●	●	●	●	
Suspected Drowning-Related Elements		●		●	●	
Suspected Fall-Related Elements		●		●	●	
Suspected Sudden Unexplained Infant Death-Related Elements		●		●		
Suspected Firearm-Related Elements		●		●	●	

Note: Case-specific data elements captured during an investigation do not stand alone, but rather complement the Medicolegal Death Investigation Frequently Used Data Elements.

Centers for Disease Control and Prevention. 2003. "U.S. Standard Certificate of Death." https://www.cdc.gov/nchs/data/dvs/death11-03final-acc.pdf.

Centers for Disease Control and Prevention. 2022. "National Violent Death Reporting System Web Coding Manual Version 6." National Center for Injury Prevention and Control. Cited September 20, 2022. https://www.cdc.gov/nvdrs/resources/nvdrscodingmanual.pdf.

Centers for Disease Control and Prevention. 2022. "State Unintentional Drug Overdose Reporting System (SUDORS) Coding Manual." National Center for Injury Prevention and Control. https://www.cdc.gov/overdose-prevention/media/pdfs/SUDORS_Coding_Manual_0D2A_v6.3.pdf.

National Center for Fatality Review and Prevention. n.d. "The National Fatality Review-Case Reporting System." https://ncfrp.org/data/nfr-crs/.

National Forensic Laboratory Information System. n.d. "NFLIS-Drug: 1,181,750 Drug Reports in 2022." https://www.nflis.deadiversion.usdoj.gov/.

National Missing and Unidentified Persons System (NamUs). n.d. "NamUs Database Application." https://namus.nij.ojp.gov/namus-2-0-technology.

Forensic Technology CENTER OF EXCELLENCE
A program of the National Institute of Justice

NIJ.GOV | National Institute of Justice
STRENGTHEN SCIENCE. ADVANCE JUSTICE.

RTI INTERNATIONAL

Published: **April 2024**

FTCOE Contact
Jeri Ropero-Miller, PhD, F-ABFT
Principal Scientist, FTCOE
jerimiller@rti.org

NIJ Contact
Danielle McLeod-Henning, MFS
Physical Scientist
Office of Investigative and Forensic Sciences
danielle.mcleod-henning@usdoj.gov

Photo Credit:
Page 1— https://www.gettyimages.com/detail/photo/businessman-working-modern-compter-document-royalty-free-image/1368237807

WWW.FORENSICCOE.ORG