

OSCME NEWSLETTER

Classification of Deaths Involving Drugs, or: It Does Matter What You Put on the Death Certificate

Every year, the CDC publishes mortality statistics for various types of death, stratified by decedent demographic information and other variables. The source for this data is the information contained within the medical certifier's portion of the death certificate. The National Center for Health Statistics uses the causes of death in Parts I and II and the information from the section titled "How Injury Occurred" to assign an ICD-10 code for the underlying cause of death and up to 20 additional codes for contributing causes.

Parts I and II:

If known, all drugs causing or contributing to death should be listed in part I, using generic rather than trade names. Some drugs, such as heroin and cocaine, have distinct ICD-10 codes, while others are grouped into categories (for example, sedatives, hypnotics and anxiolytics). If there is insufficient space on the death certificate to list all drugs in a single line, the format shown below will ensure that all drugs are coded as the underlying cause of death:

a. **Acute combined drug toxicity (heroin, cocaine, alprazolam, ethanol, and**

b. **fentanyl, diphenhydramine and imipramine)**

If the death is one of a habitual drug user, the drugs causing the death should be listed in Part I, with the chronicity of drug use or abuse noted in Part II in order for

the death to be classified as non-natural in manner.

How Injury occurred:

For a death due to **acute** effects of a drug or other substance, the following terms are preferred in Part I:

Toxicity
Toxic effect
Toxic reaction
Poisoning
Overdose
Intoxication

In contradistinction, the following terms may be interpreted as **chronic** or natural:

Abuse
Use
Dependence
Addiction
Habit
Drug taken

Other details, such as route of administration (e.g., inhaled, ingested) and drug formulation (e.g. patch, pill, solution for injection) should be included if they are known.

Manner:

Deaths due to an **acute**, identifiable poisoning or intoxication event cannot be considered natural, as they involve a substance external to the decedent. Most commonly, deaths due to drug overdose are certified as **accident**, as the drug use is not intended to cause harm or death.

This principle also applies to cases in which the decedent consented to another person to administer the drug without intent to harm or kill the decedent. With convincing historical or scene evidence (for example, a suicide note or recent prior suicidal attempts or ideation), some drug deaths may be properly classified as **suicides**. **Homicidal** drug overdoses are unusual and occur most frequently in children less than one year old. **Could not**

be determined should be reserved for those few cases in which there are two or more equally compelling manners of death which could be assigned based on investigative findings.

Understanding how mortality statistics are generated from the wording of Parts I and II and "How Injury Occurred" on the death certificate will provide more consistent and accurate death data, and can aid in public health efforts and preventions, detection of novel substances and more insight into the mechanisms of death in cases of acute and chronic substance use.

Further information may be accessed at:

https://www.tn.gov/content/dam/tn/health/documents/officeofthestatechiefmedicalexaminersoffice/resourcesforthemedicalexaminer/Certification_drug_overdose.pdf

Reference: National Center for Health Statistics. A Reference Guide for Certification of Drug Toxicity Deaths (draft document). Hyattsville, MD. 2018.

VRISM Update

Effective July 16, 2018, the Office of Vital Records will no longer accept paper death certificates. A link to register in the system can be found here: https://stateofennessee.formstack.com/forms/vrism_user_access_req_and_agree.

The Office of the State Chief Medical Examiner, in conjunction with OVR, offers a weekly WebEx conference for medical examiners each Wednesday at 2 PM CST. The VRISM help desk can be contacted at health.vrism@tn.gov or 1-855-874-7686. Additional training materials and assistance can be obtained from the OSCME.

INFORMATION

OSCME Applying to Participate in the CDC National Violent Death Reporting System (NVDRS)

The National Violent Death Reporting System is a CDC-sponsored surveillance system that collects and analyzes information on those who die violently. It includes information on all homicides, suicides and other violent deaths. Tennessee is currently one of the 10 remaining states not funded or participating in this project. The OSCME is applying for grant funding to become part of this valuable project.

NVDRS collects information about the circumstances surrounding the death and allows for it to be combined across multiple data sources. The data are collected from death certificates, law enforcement and medical examiner records. NVDRS is the first system which has the ability to link multiple deaths that are related to one another (e.g., multiple victim homicides, suicide pacts and cases of homicide followed by the suicide of the suspect).

The collection of more timely, accurate, integrated and comprehensive information will provide a clearer understanding of violent deaths. This information will be made available to those working to prevent violent deaths and further their efforts to develop interventions and help secure resources for violence prevention. Because the information collected from multiple sources is all pooled into one anonymous database, no personally identifiable information is made available.

The OSCME staff will be working with county medical examiners and local and state law enforcement to make sure their information is included. More information can be found at <https://>

www.cdc.gov/violenceprevention/nvdrs/index.html.

Investigating Hyperthermia Deaths

The hotter and more humid weather of summer increases the risk of heat-related deaths in vulnerable populations such as the very old, very young and people with chronic illness. An autopsy is recommended in cases of suspected hyperthermia. The findings at autopsy in cases involving exposure to extremely high temperatures can be supportive, but not necessarily diagnostic, of the role of extreme temperature in the death. Therefore, the diagnosis depends on history and scene investigation, combined with autopsy findings.

A small thermometer to record the ambient temperature should be part of your scene equipment. The investigator should also note the temperature on the home thermostat. During the body examination invasive documentation of body temperature by performing a liver stick is not recommended, however documentation by external methods can be helpful. This can be done by simply placing the back of a gloved hand on the decedent's skin and noting if it feels warm, cool or cold.

In these cases the documentation of local weather conditions and length of exposure of the individual is very important. The investigator can utilize online resources such as www.climate.gov to obtain past local weather data.

An autopsy can rule out most other natural disease and trauma or identify and document natural disease which contributed to or caused the death. Determining the cause of death as hyperthermia relies on documentation of environmental con-

ditions and evidence that the individual was exposed to high temperatures. Testing of the vitreous fluids during autopsy can support the diagnosis of dehydration, which often occurs in deaths due to hyperthermia. Documentation of body temperature using a rectal thermometer in cases in which sexual assault is not suspected can help support the diagnosis. Confer with the forensic pathologist before checking core rectal temperature.

MDI Andrew Wilson Leaving OSCME

Andrew Wilson joined the OSCME in August of 2016 as one of two medicolegal death investigators and has played a crucial role in the progress made by the OSCME during the past two years. Many of you have either met him at one of the OSCME training sessions or communicated with him by phone or e-mail and I am sure you will agree he is knowledgeable and always willing to assist anyone who asks. He will be greatly missed by the OSCME team.

Unfortunately, for Tennessee, his wife and children miss Iowa and their family and friends, so he, being the considerate person we all know him to be, is returning to Iowa.

His last day will be June 22nd. We all wish him the very best in his next endeavor. The OSCME has posted notice to begin the search to fill his position.



Andrew and family at the corn festival in Iowa.

A new year of JAG death investigation training is upon us. Be on the lookout for registration opportunities in the upcoming months regarding the following dates and locations:

Natchez Trace State Park: Sept. 26 & 27, 2018
Sevierville Police Dept.: Oct. 25 & 26, 2018
Montgomery Bell State Park: Dec. 11 & 12, 2018

Reelfoot State Park: April 3 & 4, 2019
Cove Lake State Park: April 17 & 18, 2019
Montgomery Bell State Park: May 14 & 15, 2019

TRAINING

“Death Investigation 101 – Not Just the Basics” Held in Perry County



Attendees L-R: Randall Terrell, Eric Bennett, Jeff Thompson, Melissa Horan, Daniel Roberts, Gary Rogers, Dr. Stephen Averett, Vanessa Averett, Paula Salhany.

The Perry County Medical Examiner, Dr. Stephen Averett, hosted a Death Investigation 101 – Not Just the Basics training June 2018. Attendees included Perry County and Hickman County ME and CMEIs as well as Hickman County Sheriff's and Hickman County EMS personnel.

The DI 101 training is a one-day course the OSCME offers at no cost to your agency and is open to all county medical examiners and medical examiner investigators. The course provides an overview of the death investigation system in Tennessee, defines cases falling under medical examiner jurisdiction, discusses forensic scene photography, positive vs presumptive identification, certifying cause and manner of death and explains how to access county, regional and state medical examiner resources.

The course includes hands-on mock scenes where the attendees as a team work through a case including body examination and scene photography.

This training course is approved for: 8 hour of POST, ABMDI, EMS and 5.75 hours of AMA credits that are free to the attendee.

If your agency is interested is hosting a training please contact our office at 844-860-4511 or send an email inquiry to

frances.wheatley@tn.gov.



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