

# OSCME NEWSLETTER

## The Opioid Epidemic: A Growing Concern in Tennessee

Synthetic opioids have arrived in Tennessee. We are all aware of the increase in fentanyl-related deaths over the past 4 or 5 years, both nationwide and in Tennessee. Carfentanil, a new, even more lethal, drug has emerged. Fentanyl is about 50 times as potent as morphine; carfentanil is about 100 times as potent as fentanyl. In April, Metropolitan Nashville police (MNP) intercepted an envelope from the mail containing 140 mg of carfentanil. For comparison, an adult male elephant requires 10-15 mg of carfentanil to become fully sedated. Just a few grains of this powder-like substance are enough to cause death in an adult, and the drug can be absorbed orally, transdermally, injected, via inhalation, or through contact with mucous membranes or the eyes.



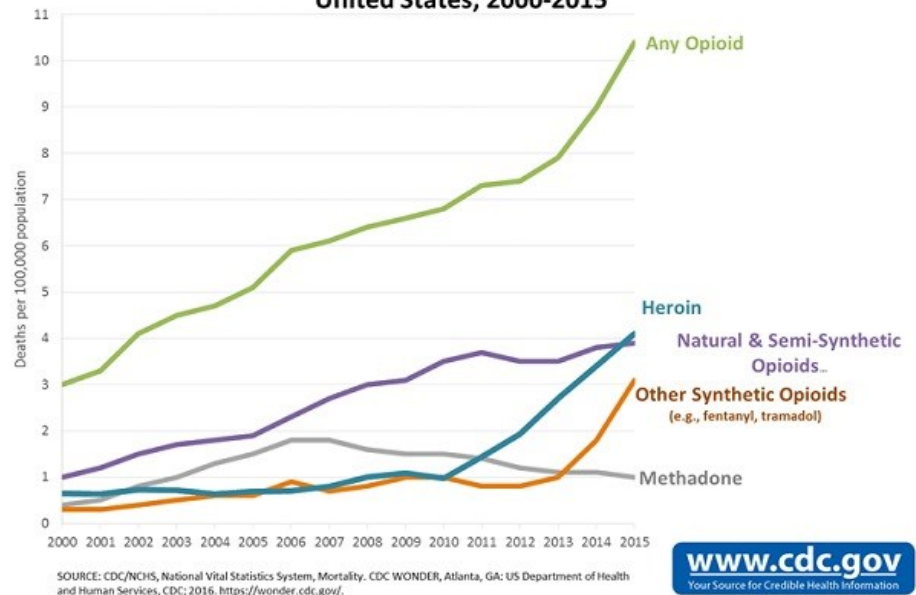
Counterfeit Oxycodone (above)



Pharmaceutical Oxycodone (above)

In many cases, the drug is made to look like oxycodone or alprazolam tablets and sold as such. In west Tennessee, there has been a recent large seizure of counterfeit oxycodone pills, marked "M 30" and "ALG 265". These pills contain U-47700, furano-fentanyl, and a third substance suspected to be a synthetic

Overdose Deaths Involving Opioids, by Type of Opioid, United States, 2000-2015



opioid. At least one death has been attributed to U-47700 in 2017. "Grey death", a concrete-like substance which may contain heroin, fentanyl analogues, and other synthetic opioids has been responsible for deaths in Ohio, Georgia, and Alabama. As you know, the detection of these substances in apparent overdose deaths requires specialized testing, including knowledge of the identity of the suspected culprit drug.

The Drug Enforcement Agency (DEA) has released a guide for first responders who may come into contact with the drug. Nitrile gloves, an N-95 mask, eye protection, coveralls, and shoe covers are recommended personal protective equipment (PPE). Unpowdered gloves are preferred as the glove powder can mix with the drug during donning and doffing, increasing the risk of inhalational and transdermal exposure. Naloxone, which can reverse the effects of the drug, should be readily available. Multiple doses may be necessary given the potency of these substances.

If you come into contact with the drug or with contaminated items without PPE, immediately summon EMS. Symptoms of opioid intoxication occur within seconds to minutes and include respiratory depression, stupor, pinpoint pupils, and clammy skin. Clothing should be removed, bagged, and destroyed. Showering with soap and water and rinsing the eyes and mouth in conscious victims is recommended. Alcohol-containing

hand sanitizer can enhance transdermal absorption of the drug and should not be used. [www.dea.gov/druginfo/Fentanyl\\_BriefingGuideforFirstResponders\\_June2017.pdf](http://www.dea.gov/druginfo/Fentanyl_BriefingGuideforFirstResponders_June2017.pdf).



Potentially Fatal Dose of Fentanyl

The Tennessee Department of Health, Tennessee Bureau of Investigation, Tennessee Department of Mental Health and Substance Abuse Services and Tennessee Department of Safety and Homeland Security held a joint press conference in June regarding the lethality and potency of these recently emerging drugs. You can view the press conference in its entirety at: <http://fox17.com/news/local/tennessee-agencies-warn-of-alarming-rise-in-fentanyl-and-newest-worry-carfentanil>. Photographs courtesy of MNP, DEA, and NIH.

## LEGISLATIVE UPDATES

### “Help Find the Missing”

During the 2017 legislative session one bill of particular interest to county medical examiners passed. HB0044 / SB0113 sponsored by Representative John Mark Windle, District 41, and co-sponsored by Senator Paul Bailey, District 15, amended T.C.A. Title 38 (Prevention and Detection of Crime), Chapter 6 (Tennessee Bureau of Investigation), Part 1 (General Provisions) by adding a new section cited as the “Help Find the Missing Act” that will go into effect July 1, 2017. The “Help Find the Missing Act” is based on a federal bill, also known as Billy’s Law, that was introduced but not passed and adds new requirements for Tennessee medical examiners and law enforcement. The Act is meant to help bridge the gap between missing persons and unidentified persons cases.

Under the new law, decedents reported to the county medical examiner, where the identification is unknown or unable to be determined shall be referred for examination to a regional forensic center (RFC). If the decedent remains unidentified after all available methods have been exhausted the RFC will furnish the Tennessee Bureau of Investigation (TBI) and the National Missing and Unidentified Persons System (NamUS) all available information including but not limited to prints, dental charting, photos and written descriptions of personal effects or clothing. All of the Regional Forensic Centers, and some of the county medical examiners, have users registered in NamUS who already enter and maintain information from their cases in the hope of eventual identification.

In addition, this law will require entry into NamUS by local law enforcement information for those who have been reported as missing. Law enforcement must collect, store and report information on all missing persons reported to them. The Act applies to any person who may be “voluntarily missing” or defined under the T.C.A. § 38-6-121 as a “missing citizen”. Presently the National Crime Information Center (NCIC) has 1194 missing person cases for Tennessee, but only 243 have been entered into NamUS. The changes to the law should improve the likelihood of matching unidentified bodies with reported missing persons.

The NamUS database also contains a third section, the Unclaimed Persons Database (UCP). This database contains information about deceased persons who have been identified by name but no next of kin or family

member was located to claim the body. This allows medical examiners and RFCs to enter their unclaimed decedent’s information into a database that is searchable by the public using a missing person’s name and year of birth. County medical examiners and RFCs are encouraged to enter their unclaimed decedents into the database to provide families the ability to locate their loved ones. (<https://www.claimus.org>)

The Office of the State Chief Medical Examiner (OSCME) with NamUS and local law enforcement agencies are coordinating “Missing Persons Day” events across Tennessee for 2017/2018. The goal of these events is to assist families to input identifying information into NamUS about their loved ones who may have died in another state or even another part of Tennessee and were buried or cremated without next-of-kin being located. Law enforcement will be present to answer questions about missing person cases, to check if a report is on file or to file a missing person’s report if necessary. Families of persons who have been missing for more than one month are encouraged to bring at least two biological relatives of the missing loved one (to provide family reference samples) and any police reports, dental or medical x-rays and other identifying documents, ID photos of the missing person or fingerprints (either taken as an adult or child).

Dates and locations of events are:  
 Knoxville – August 5, 2017 – 11 am to 3 pm – Bearden Branch Library, 100 Golf Club Road, Knoxville, TN  
 Chattanooga – November 4, 2017 – 11am to 3 pm – **location to be determined**  
 Tri-Cities – September 23, 2017 – 11 am to 3 pm – **location to be determined**  
 Jackson – October 12, 2017 – 11 am to 3 pm – Jackson-Madison County Health Department, 804 North Parkway, Jackson, TN  
 Nashville – October 13, 2017 – 11 am to 3 pm – Lentz Public Health Center, 2500 Charlotte Avenue, Nashville, TN  
 Memphis – November 18, 2017 – 11am to 3 pm – First Congregational Church, 1000 Cooper Street, Memphis, TN

If you would like to sponsor an event in your jurisdiction and you would like the OSCME to assist with coordination or staffing please contact our office at 1-844-860-4511 or 1-615-837-5037.

The final version of HB0044 / SB0113 can be found on the OSCME website at <https://www.tn.gov/health/section/OSCME>. Click on the left hand tab “2017 Legislative Updates.”

For more information on NamUS and to learn about registering as a user go to <https://namus.gov> or contact Amy Dobbs, Regional Systems Administrator, at amy.dobbs@unthsc.edu.

### “Suicide” Bill

Generally, present law requires that a death certificate for each death that occurs in this state be filed with the office of vital records or as otherwise directed by the state registrar within five days after death and prior to final disposition. When inquiry is required, the medical examiner must determine the cause of death and complete and sign the medical certification within 48 hours after taking charge of the case.

During the 2017 legislative session Tennessee Code Annotated, Section 68-3-502, was amended by adding language to present law. Below is a summary of the changes:

- (1) When a county medical examiner suspects that suicide may be a potential manner of death, the medical examiner is encouraged to consult the decedent’s treating mental health professional, if known or applicable, prior to determination of manner of death;
- (2) If, after inquiry by the county medical examiner, the deceased’s next of kin disputes the manner of death determination of suicide on the death certificate, the next of kin may seek reconsideration of the manner of death determination. A written request for reconsideration must be submitted within one year of the date the death certificate is filed with the office of vital records and must be supported by a signed affidavit. This amendment sets out the process for reconsideration in detail; provides for amending a death certificate when a reconsideration results in a change in the manner of death determination; and provides for further review and mediation if, after reconsideration, the manner of death is still disputed; and
- (3) The department of health must maintain a notice of decedents’ next of kin rights with regard to this amendment on its public website.

The details and specific language can be accessed via the OSCME website at <https://www.tn.gov/health/section/OSCME>. Click on the left hand tab “2017 Legislative Updates.” or via <http://publications.tnsosfiles.com/acts/110/pub/pc0493.pdf>. This law took effect June 13, 2017.

# INFORMATION & OPPORTUNITIES

## Identification of the Decedent

Establishing or confirming the positive identification of a decedent is a critical step in every death investigation and should be considered as important as determining the cause and manner of death. There are multiple methods that can be used to identify a decedent (visual methods, scientific methods, circumstantial methods). The investigator should utilize as many methods as are available to establish a positive identification and thoroughly document the methods used on the Report of Investigation (ROI).

Direct visual identification is the most common method currently used, however visual identification alone has the greatest potential for error. Identification of the body may be made by showing a member of the family, a friend, or an individual who knew the decedent well, either the body or a photograph of the body/face. This method should only be used when the decedent is visually recognizable. Information about the person making the identification, to include name, address, contact phone number, and relationship to the decedent, should be documented on the ROI. When a decedent is either positively or presumptively (tentatively) identified by a photograph from a driver's license or other official documents, it is encouraged that this document be sent with the body to the regional forensic center. County Medical Examiners/Medical Examiner Investigators (CME/I) should not use "identified by family" or "known to law enforcement" in their reports but should document with specific information who was the identifier and their contact information if questions arise in the future concerning the identification. Persons, even close family members, can make errors in identifying a deceased body. Therefore it is best to include additional circumstantial information such as "decedent found in own residence, or vehicle".

If the decedent is not readily identified by visual means, either due to decomposition or trauma, scientifically recognized methods should be employed for positive identification. Accepted scientific methods include fingerprints, dental, radiographic, and DNA

comparisons. While these techniques are powerful tools that can establish a positive identification they are all limited in that they require a known standard for comparison. The investigator should ask next-of-kin if any of these resources (fingerprints on file, dental records or x-rays) are available or if the decedent had any implanted medical devices. Implanted medical hardware can be recovered at autopsy and used to establish identification.

As a last resort, if positive identification cannot be made via visual or scientific means, then a presumptive or circumstantial identification may be possible. Circumstantial evidence may include, but is not limited to, ID on body, jewelry, scars, and tattoos, location of body within a residence or vehicle, and anthropological data. Circumstantial evidence must be carefully considered and, if you feel the circumstantial evidence is not strong enough to be sure of identity, you must send the body for autopsy.

*"Errors in identification can have disastrous results including traumatized families, negative media attention, and possible litigation."*

If possible, identification should be established prior to transport to a regional forensic center, but should be absolutely confirmed prior to release to a funeral home. If a decedent cannot be identified prior to transportation for autopsy, the tag placed on the body should indicate UNKNOWN MALE/FEMALE, COUNTY OF DEATH, and any other information commonly used by the CME/I. If the identification of the decedent is tentative, the tag should be labeled "presumed to be" (PTB) or "believed to be."

The importance of establishing the decedent's identification cannot be overstated. Proper identification allows for notifica-

tion of next-of-kin, settlement of estates and survivors benefits, resolution of criminal and civil litigation and accurate completion of the death certificate. Errors in identification can have disastrous results including traumatized families, negative media attention, and possible litigation. As part of a complete and high-quality death investigation you should use as many methods (visual, scientific and circumstantial) as are available to identify a decedent and document those methods on the ROI.

## Opportunity to Serve on Advisory Council

The medical examiner advisory council will be reorganized and revamped with new membership following the passage of Senate Bill 1016/House Bill 1027 during the 2017 legislative session. TCA § 38-7-201 has been amended creating a new 15 member medical examiner advisory council to include: the director of the Tennessee Bureau of Investigation (TBI), one forensic pathologist from each of the five regional forensic centers, one district attorney general, one district public defender, three county medical examiners (one from each grand division), one administrator from a non-hospital affiliated regional forensic center, one licensed funeral director, one county mayor and the state chief medical examiner. The council will meet quarterly at a minimum, with electronic participation allowed. Members will be appointed by Governor Haslam upon review of applications. If you are interested in serving on this council, complete the application for gubernatorial appointment to a board or commission found at: [https://www.tn.gov/assets/entities/health/attachments/application\\_for\\_board\\_member.pdf](https://www.tn.gov/assets/entities/health/attachments/application_for_board_member.pdf)

All applications and supporting documents (CVs, résumés, etc) should be sent to the TN Department of Health, C/O Jeremy Davis, Andrew Johnson Tower, 7th FL, 710 James Robertson Parkway, Nashville, TN 37243.

The final amended version of the bill can be found on the OSCME webpage at: <https://www.tn.gov/health/section/OSCME> using the left hand tab, "2017 Legislative Updates."

# LOCAL INFORMATION

## Death Investigations 101 is Not Just the Basics . . .

The OSCME is changing the name of the one day training from “Death Investigations 101” to “Death Investigations – Not Just the Basics.” It is possible that some CMEs and CME-Is did not sign up because they may have thought this was just a session for those new to death investigation. Although the course does cover some of the basics, it also provides lots of updates and new information that everyone providing death investigations needs to know. The OSCME will continue over the next two years to travel to most of the 32 judicial districts and provide these one-day training sessions providing lectures on death scene investigation, photography, death certification and updates to the TN system. In addition attendees will participate in two mock scene investigations and be given a chance to practice investigating a scene, take photographs and complete a report of investigation (ROI). These sessions will also provide an opportunity for attendees to work with other CMEs and CME-Is within their judicial district.

The new updated OSCME County Medical Examiner Handbooks have returned from the printers and the staff at the OSCME has been busy assembling them into three ring binders. Attendees at the “Death Investigations” trainings will be given the new printed version.

The next two training sessions will be held on August 9, in judicial district 14 (Coffee County) and August 15, in judicial district 17 (Marshall Counties). Coffee County registration is available online at: <https://goo.gl/forms/MZaEm5W0nZ5U9lfy2>. Marshall County registration is available online at: <https://goo.gl/forms/iad8xJuWIXMNjk653>. All CMEs and CME-Is in these and any surrounding counties are welcome to register and attend.



Putnam County—Death Investigation 101

## Serving on a local Child Fatality Review Team

Closely reviewing the death of each child in Tennessee provides information about how to respond to a fatality and help prevent such deaths in the future. These multidisciplinary teams meet locally, review and discuss the cases and ultimately make recommendations as to how the state can best use resources to help prevent future deaths. Participation of the medical examiner on a local team provides an invaluable service, not only in helping to review the cases and provide additional information, but also to provide answers to questions asked by other members on the team and help to interpret medical records and autopsy or scene findings.

T.C.A. § 68-142-106 outlines the membership for local teams and includes the regional health officer, Supervisor of Children’s Services, Medical Examiner, Prosecuting Attorney, a member of the local education agency, a mental health professional, a pediatrician or family practice physician, an emergency medical service provider or firefighter, and juvenile court representative. The members review all deaths of children 17 years of age and younger.

According to the state “2017 Child Fatality Annual Report,” which reported the data for 2015, the most recent available, 890 deaths occurred in children under the age of 18 years in Tennessee. This is a child mortality rate of 59.0/100,000 and it exceeds the national rate for 2014 of 49.7. The majority of these deaths, 569, occurred in children under age 1 year and the leading cause of death among these infants in Tennessee was prematurity. However, of particular interest to those involved in death investigation, was that the number of children’s deaths overall due to external causes increased, with 241 child deaths classified as due to causes which included motor vehicle crashes, weapons, asphyxia, fire/burns, poisoning or overdose and fall/crush injuries. This was a 26% increase from the 191 cases observed in 2014 due to external causes. The full “2017 Child Fatality Annual Report” is available at: [https://www.tn.gov/assets/entities/health/attachments/2017\\_CFR\\_Annual\\_Report\\_Final.pdf](https://www.tn.gov/assets/entities/health/attachments/2017_CFR_Annual_Report_Final.pdf)

If appointed as a member of a local child fatality review team, take the appointment seriously, try to attend all of the meetings and know that the teams can better review many of the cases with input from the medical examiner. If unable to attend the meetings, please assist the team to find a replacement medical examiner to serve on the team.