



OSAC MEDICOLEGAL DEATH INVESTIGATION SUBCOMMITTEE:

STRATEGY STATEMENT FOR MEDICAL EXAMINER/CORONER DRUG RELATED DEATH INVESTIGATIONS

Published: February 14, 2018

PROBLEM STATEMENT

The United States is in the midst of an epidemic of drug overdose deaths. Since 1999, the rate of deaths from drug overdoses has nearly tripled (1). There were over 52,404 drug overdose deaths in 2015 in the United States, exceeding the per capita death rate of motor vehicle deaths (2). Drug overdose deaths are investigated by medical examiners and coroners. The inconsistent patchwork of medicolegal death investigation (MDI) systems that exist throughout the United States impact the accuracy, timeliness, and availability of mortality data from death certificates and other sources (3). These shortcomings undermine efforts to coordinate resources in reducing drug-related deaths and make it difficult to mount effective public health, law enforcement, and public policy responses to the opioid crisis. Essential to reducing variability in the practice of drug-related death investigation and certification and enhancing the quality, reliability and accessibility of drug mortality data are 1) adhering to best practices in drug-related death investigation conducted by medical examiners and coroners, 2) enhancing drug-related death surveillance by medical examiners and coroners through improved communication and coordination of MDI data with law enforcement, public health and safety, and 3) strengthening, expanding, and promoting interoperability among death investigation case management systems and ensuring access to essential case information for quality control and data analysis (4).

Background

The medical examiner/coroner professional community is in a unique position to help define and inform policy decisions at all levels of government regarding the drug death epidemic and fatal drug use, abuse, and its consequences. Best practices to improve the quality and consistency of death investigation have been recommended by the National Association of Medical Examiners (a national medical examiner professional organization) and by Federal agencies such as the National Institute of Justice (5,6). These recommendations will both enhance the quality MDI and assist law enforcement, public health, and safety responses to the opioid and drug epidemic (5,6).

In order to reduce variability in the practice of death investigation and certification in response to the opioid crisis as well as enhance the quality, reliability, and accessibility of drug mortality data, the MDI systems throughout the nation must conduct standardized drug death investigation by medical examiners and coroners. Additionally, the collection and dissemination of timely, accurate, and reliable drug death statistics to stakeholder agencies are essential to assist in effective public health, law enforcement, and public policy responses to the national drug-death crisis.

Best Practices and Standards for Death Investigation

Consistent and quality drug-related death investigations conducted by medical examiners and coroners that adhere to best practices is essential to reduce variability in the practice of drug-related death investigation and certification and enhance the quality, reliability, and accessibility

of drug mortality data. Death investigation best practices and standards—for autopsy, toxicology, death scene, medical and prescription history—need to be kept current to address the evolving threats from novel psychoactive substances as well as the continued involvement of pharmaceutical opioids and other drugs. Adherence to these best practices and standards, which include routine toxicological testing of postmortem samples, can be accomplished through increased funding and education. Toxicology should include mandatory testing for a standard panel of illicit and prescription drug analytes on all suspect deaths. A focused research needs strategy includes identification of barriers to best practice implementations by medical examiners and coroners.

Timely, Accurate, and Reliable Drug Death Data

Existing multiagency, cross-disciplinary data sharing and investigatory initiatives (e.g., RxStat Initiative in New York, Maryland Local Overdose Fatality Review Team) should be expanded to support nationwide data coordination (7). Epidemiologists and statisticians can utilize the data in conjunction with medical examiners and coroners to inform federal, state and local policy and programs. Specific needs include funding for upgrades to outdated and inadequate medical examiner/coroner databases, upgrades of medical examiner and coroner information technology infrastructure, and for developing compatible data systems for interoperability among jurisdictions.

Developing local, regional, and national incident surveillance systems to improve outbreak detection of deaths involving illicit opioids (including heroin and illicit fentanyl) is imperative. This will allow reporting and monitoring of specific drugs and facilitate a rapid and effective response by all stakeholders.

References

- 1) Rudd RA, Seth P, David F, Scholl L. Increases in Drug and Opioid Overdose Deaths—United States, 2000–2015. *MMWR Morb Mortal Wkly Rep.* 2016 Dec 30; 65(50-51):1445–1452. Available at <https://www.cdc.gov/mmwr/volumes/65/wr/mm655051e1.htm>.
- 2) Xu JQ, Murphy SL, Kochanek KD, Arias E. Mortality in the United States, 2015. NCHS data brief, no 267. Hyattsville, MD: National Center for Health Statistics. 2016. Available at <https://www.cdc.gov/nchs/products/databriefs/db267.htm>.
- 3) National Research Council of the National Academies. Strengthening forensic science in the United States: A path forward. Washington DC: National Academies Press. 2009. Available from: <https://www.nap.edu/catalog/12589/strengthening-forensic-science-in-the-united-states-a-path-forward>.
- 4) National Science and Technology Council. Strengthening the medicolegal death investigation system: Improving data systems. Office of Science and Technology Policy. Washington DC: 2016. Available at

https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/NSTC/strengthening_the_medicolegal_death_investigation_system_final.pdf

- 5) US Department of Justice, Office of Justice, National Institute of Justice. Death Investigation: A Guide for the Scene Investigator. Washington, DC: 2011:1-49. Available at <https://www.ncjrs.gov/pdffiles1/nij/234457.pdf>.
- 6) Davis GG, National Association of Medical Examiners and American College of Medical Toxicology Expert Panel on Evaluating and Reporting Opioid Deaths. Position Paper: Recommendations for the Investigation, Diagnosis, and Certification of Deaths Related to Opioid Drugs. *Academic Forensic Pathology*. 2013 Mar; 3(1):77-83.
- 7) U.S. Department of Justice. Addressing the heroin and opioid crisis. *U S Attorneys Bulletin*. 2016; 64 5. Available at <https://www.justice.gov/usao/file/895091/download>.