

# Why You Need an Applied Forensic Epidemiologist!



## Who are Applied Forensic Epidemiologists?

Using the data collected through medicolegal death investigations (MDI), medical examiners and coroners (MEC) identify the diseases and cause of death in a population. The findings from MDI data provide key information for public health planning, prevention efforts, and policy development.

MEC offices often employ epidemiologists or data analysts who use public health methods to analyze MDI data. These epidemiologists are called applied forensic epidemiologists (in contrast to other types of forensic epidemiologists who determine the probability of cause of death in potential criminal investigations or in disease-related litigation).

Responsibilities may vary by jurisdiction, but in general, applied forensic epidemiologists analyze MDI data, track trends in causes of death, prepare reports on key conditions, create subsets of MDI or other data to share with law enforcement and public health entities, and support research efforts as needed.

Applied forensic epidemiologists act as key liaisons between MEC offices and public health entities, by providing analysis results and interpreting the findings from aggregated MDI data. This information is essential for identifying the populations at risk for various causes of death, as well as the locations and circumstances associated with these deaths – information that is critical for the development and implementation public health interventions.

## Applied forensic epidemiologists can benefit an MEC office in many ways

- Respond to data requests
- Identify and pursue external funding
- Prepare annual statistical reports
- Interpret complex data for key stakeholders
- Monitor data quality
- Improve data and workflow processes
- Assist with accreditation
- Implement data visualization tools like public-facing dashboards
- Forecast future caseloads
- Disseminate analytical results and best practices to national audiences
- Broaden scientific and public health networks



## Applied forensic epidemiologists can promote collaboration with external partners

- Enhance network and collaboration opportunities between MEC offices and key partners including public health and academic institutions
- Educate partners on the value of Medical Death Investigation (MDI) Data
- Provide data and expertise to mortality review panels
- Engage with national surveillance systems such as the CDC's National Violent Death Reporting System (NVDRS) and the State Unintentional Drug Overdose Reporting System (SUDORS)
- Provide data to inform/expand partners' research activities
- Establish data use agreements
- Establish automated downloads and data sharing procedures for required reporting
- Train the next generation of epidemiologists and data scientists to consider roles in MEC offices

## For more information, visit the CSTE Applied Forensic Epidemiology website

The Council of State and Territorial Epidemiologists (CSTE) is an organization of member states and territories that serves as the professional home of over 3,000 applied epidemiologists. CSTE demonstrates a commitment to advance public health policy and epidemiologic and surveillance capacity across the spectrum of public health disciplines by hosting collaborative space to discuss innovative methodologies. CSTE members have surveillance and epidemiology expertise in a broad range of areas including infectious diseases, informatics, data modernization, noninfectious diseases and more.

In 2022, CSTE engaged professionals serving epidemiology functions in MEC offices by convening a workgroup for applied forensic epidemiologists. This workgroup serves as the first dedicated community for these unique professionals to network and build peer consulting.

To learn more about CSTE and the work of Applied Forensic Epidemiologists, please visit:

<https://www.cste.org/page/AppliedForensic>



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