The Role of State Medical Examiner Data in the Prescription Drug Problem: Affecting Policy

Marcella H. Sorg, PhD, RN, D-ABFA
Director, Rural Drug and Alcohol Research Program
Margaret Chase Smith Policy Center
University of Maine
Background

- My approach as a forensic & medical anthropologist (producer & consumer of drug-related data)
- Research focus: rural state drug-related mortality, primarily ME, NH, VT – work with Offices of Chief Medical Examiner
- Other related experience: NAME & NVDRS, DAWN, Methadone Mortality, NIDA/CEWG
Forensic Investigation of Death: Between Public Health & Public Safety

Forensic Death & Injury Investigation

Public Safety & Criminal Justice

Public Health Surveillance

Public Policy

CDC State Strategies 2009
Not all States have ME/C Data

- Differences in how death investigation done across states and even within states
  - Coroner v. medical examiner systems
  - Local laws, culture, practices, and funding
- Often no statute-based obligation to produce data, except for Vital Records
Dual role of Medical Examiner/Coroner:
Public Health and Public Safety

- Some in Dept. of Health
- Some in Atty. Gen. or Public Safety
- Others independent
Death Investigation: To Determine Cause & Manner for Violent, Suspicious & “Unattended” Deaths

- State or local role, not federal
- Over 3000 medical examiner or coroner jurisdictions
- Duties regulated by statute, rule-making and custom
- Variation: located in public health or safety
- Variation: resource level
Medical Examiner v. Coroner

- Medical Examiners hired or appointed
  - Variation in requirements, e.g. whether board certified in pathology and forensic pathology
- Coroners are elected, mostly at county or district level
  - Majority are non-physicians
Variation in Resources

- Appropriated as public policy and paid by tax dollars, hence limited and variable
- Funding levels for staffing & for services needed in drug deaths, e.g., transportation, autopsy, toxicology, usually not determined by them
- Toxicology frequently out-sourced
- Non-physician coroners out-source autopsies
# Variation in ME/C Systems

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>TYPE</th>
<th>POP</th>
<th># STATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>District</td>
<td>Coroner</td>
<td>4686675</td>
<td>2</td>
</tr>
<tr>
<td>County</td>
<td>Med. Examiner</td>
<td>15069076</td>
<td>2</td>
</tr>
<tr>
<td>District</td>
<td>Med. Examiner</td>
<td>15982378</td>
<td>1</td>
</tr>
<tr>
<td>County</td>
<td>Coroner</td>
<td>23758776</td>
<td>9</td>
</tr>
<tr>
<td>State</td>
<td>Mixed ME/C</td>
<td>31144888</td>
<td>7</td>
</tr>
<tr>
<td>State</td>
<td>Med. Examiner</td>
<td>57470619</td>
<td>18</td>
</tr>
<tr>
<td>County</td>
<td>Mixed ME/C</td>
<td>132737435</td>
<td>11</td>
</tr>
</tbody>
</table>
Drug Death Investigation Variation

- Scene investigation (training level varies):
  - Local M.E.
  - Non-physician death investigator
  - Coroner
  - Police

- Who obtains toxicology sample?
- Is there an autopsy?
- Criminal involvement?
- Where: residence, outdoors, hospital?
Forensic Toxicology

- Dose = key to toxicity, but dose usually unknown
- Toxicology interpretation depends on
  - Persistence in body (postmortem changes, esp. with decomposition)
    - Heroin/morphine, “opiate”
  - Drug combinations
  - Chemical detection
    - Was it screened for? (Labs differ !!)
    - Drug v. metabolite
    - Had it been distributed in the body?
Forensic Toxicology (2)

- Just presumptive (even if 90%)
- Usually requires two tests (screening, quantitative)
- Peripheral blood is best (other sources also used)
- Issue of individual tolerances (especially critical for opiate/opioid deaths)
- Medical data (heart/liver/lung disease)
Wish List – More Difficult

- Where did decedent obtain drugs?
- Were they prescribed?
- What form was ingested?

- Scenes are “cleaned”
- Requesting medical & prescription records consumes resources
- Prescription Monitoring Programs - access to M.E.?, methadone clinics included?
Cause of Death

- Part I. The mechanism (medical reason the person is dead)
  - Up to four “links” in causal chain

- Part II. May note “other significant conditions contributing to death”
Manner of death—5 Choices

- Homicide
- Suicide (standards vary across districts)
- Accident – most opiate/opioid induced deaths
- Undetermined
- Natural (e.g., therapeutic drug at therapeutic levels)
How do medical examiners view prescription drug deaths?

- Complicated cases that take more time than others (but interesting)
- Often frustrating due to interpretive issues with multi-drug toxicity (levels may be low)
- Source of large increase in work load (often w/ no increase in resources)
How do epidemiologists view prescription drug deaths?

- Part I versus Part II mentions
- What to do with “polydrug” mention
“Surveillance of drug-related deaths would be aided if physician certifiers included specific drug names on death certificates when drugs have caused or contributed to death.” (p. 539)
Pressure on Medical Examiners and Coroners

- **To provide timely statistical data**
  - Policy maker decisions: (a) drug treatment methods & funding; (b) law enforcement focus and funding; (c) how prescribers prescribe

- **To provide data that may or may not exist**
  - Where did decedent obtain drugs?
  - Were they prescribed?
  - What form was ingested (e.g., methadone liquid versus tablets)
Statewide ME/C Data Varies

- Fewer than half of states have drug death data
- Data not comparable state to state
- Data may not include focus on prescription drug problem
Maine

- 1.3 million
- Only 1 SMSA
- Most of state very low pop. density
- Since 1968 a Chief Medical Examiner system with single office
Office of Chief Medical Examiner Protocol - Maine

- Overdose deaths
  - Usually no scene visit by medical examiner
  - About 78% brought for autopsy (only one site)
  - Full drug toxicology screen
  - Histology if indicated
Autopsy Goals

- To find (or rule out) natural disease that may have caused the death
- To find (or rule out) trauma that may have caused the death
- To take samples for toxicology and histology
Drug Deaths as a Percent of Accepted Cases

Maine OCME

Trends in Case Complexity

- Autopsy percent
- Drug death percent
- Toxicology percent

Percent of Cases Accepted by Year:
- 1997: 10%
- 1998: 15%
- 1999: 20%
- 2000: 25%
- 2001: 30%
- 2002: 35%
- 2003: 40%
- 2004: 40%
- 2005: 40%
- 2006: 40%
Maine OCME: Drug Death Impact Without Funding Increase

- 429% increase in drug deaths 1997-2006
  - Transportation for autopsy (78% in 2006, down from nearly 100%)
  - More background checks for medical records
  - Frequently requires histology
- 136% increase in autopsies since 1997
- 133% increase in cases requiring toxicology since 2001
2001: A drug odyssey

- Increase in opiate addiction in Maine
  - Treatment episodes
  - Demand for methadone treatment
  - Perception that deaths had increased
  - Generally blamed on OxyContin
Drug Odyssey cont.

- Office of Substance Abuse formed a task force
- Office of Chief Medical Examiner & Attorney General obtained Byrne Funds (Dept. of Justice) for me to do study
Findings

Maine Drug Deaths

- Accidents
- Suicides

CDC State Strategies 2009
Action 2002

- Press Conference (AG, ME, and me)
  - 92% deaths had prescription drug cause
- Methadone take homes
- OxyContin off preferred drug list
- Work began to get a Prescription Monitoring Program passed (failed the first time; started FY 04-05)
Continued Monitoring

- Federal Funding only: Dept. of Justice (i.e., no state funding)
- Community Epidemiology Surveillance Network began to form at state level (I was asked to do first comprehensive annual report). SAMHSA/CSAT funding (i.e., no state funding)
Continuing Requests

- Utilized to justify funding for Maine Drug Enforcement Agency via press conference at which I was asked to contribute

- Many, many media requests to the Office of Chief Medical Examiner for data on methadone in particular
Community Groups

- County groups funded by a statewide prevention grant asked for county-specific data. (not funded by state resources)
Substance Abuse Services Commission

- Requested drug death data and updates
- I was asked to sit on the Commission
Prescription Monitoring Policy

Issues

- **Maine: ME/C has no access, but will soon**
  - Must still call all methadone clinics

- **Study of PMP participation by licensees**

- **Methadone clinic data not included, so are methadone clinic providers using the PMP?**
  - Few methadone clinics do death reviews and use PMP
  - Concept: “medical prescription home” for methadone clinics

- **Providers still don’t know how to respond to data about diversion, misuse**
Medicaid

- Should Medicaid use the PMP?
- Should decedent list go to Medicaid or the PMP, and if so what responses are needed?
Federal Feedback Loops

- DAWN – Maine became a state contributor to ME data starting 2003
- NIDA-CEWG Maine was asked to be a guest researcher & regular contributor starting in 2004
Conclusions

- Fiscal impact of drug deaths on Medical Examiner & Coroner systems is significant
- Funding for data processing and dissemination is frequently federal and sporadic
- Because methadone is such a significant part of the pattern, more attention is needed to coordinate data from methadone clinics, medicaid databases, and prescription monitoring
- State-specific systems will be needed
Recommendations

- Provide access to PMP data to the ME/C
Cautions

- Avoid requesting duplicative surveillance data collection
- Beware of creating unfunded mandates
- Be aware of problems comparing raw data across variable ME/C jurisdictions