SCIENTIFIC WORKING GROUP FOR
MEDICOLEGAL DEATH INVESTIGATION

SWGMDI

Infrastructure Committee

Report 4

State Medical Examiner Survey

January, 2012

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State Medical Examiner Survey
Report Prepared January 3, 2012
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Beginning in April 2011, state medical examiners (N-26) were notified by the SWGMDI of an on-line survey form on which they could report information about infrastructure issues such as facilities, staffing, funding, and other items. As of the date of this report, 22 state medical examiners have responded and the only offices for which information is lacking are Arkansas, DC, Tennessee, and New Jersey.

Table 1. Adequacy of facility numbers, Forensic Pathologist Supply, and Office Funding

Facilities	**Number of States with this response**
We can get by but could benefit from additional autopsy facilities in the state.	10
We desperately need additional facilities in the state.	1
We have an adequate number of autopsy facilities and need no more.	11
Forensic Pathologist Supply	
Our supply of board certified forensic pathologists meets our needs completely.	5
We can function but having additional forensic pathologists would be beneficial.	10
We definitely need more board certified forensic pathologists in our state.	7
Funding Level	
Appropriate for our needs.	1
Adequate.	5
Marginally adequate.	5
Less than Adequate.	11

Table 2. Number of facilities in each state and maximum mileage a body need be transported from death scene for autopsy.

Number of facilities	Mileage
1	1200+
3	112
1	76
2	50
4	200
10	198
4	200
1	180
1	260
1	225
5	360
12	170
1	289
1	150
1	361
2	250
4	350
1	55
1	390
4	270
1	150
2	150

Table 3. Forensic Pathologist Numbers and Caseload Information for each state

Board Certified Forensic Pathologists	Non-Board Certified Forensic Pathologists	FP Caseload > 250	FP Caseload > 325
3	0	No	No
8	3	No	No
5	0	Yes	No
2	2	No	No
13	1	Yes	No
8	2	No	No
10	2	No	No
14	1	Yes	No
2	0	No	No
2	0	Yes	Yes
3	0	Yes	No
11	3	Yes	No
3	0	Yes	No
2	0	No	No
7	1	No	No
5	1	Yes	Yes
6	0	Yes	No
1	2	No	No
3	1	Yes	Yes
14	0	Yes	No
2	1 part time (< 25 autopsies)	No	No
3	4	No	No

Table 4. Facility Needs Identified by State Medical Examiners

Facility Needs
If anything, more square footage with more storage and office space.
We need a new morgue in one of our cities. It is full of mold and fungus in the ceilings and walls.
Major HVAC replacements which are currently funded and being bid.
None
None.
The State main facility does not currently need an upgrade, but several of the others need to be completely renovated and updated.
New digital x-ray equipment for one location, possibly a new cooler for one location, 2 new facilities
None. Facility opened 2010
The facility is adequate for the current number of autopsies and the current number of employees. However, the number of autopsies that are currently done is bare minimum and in order to really increase autopsy percentages additional staff, space and equipment would be needed, which would require expansion of the existing facility. Having additional regional facilities might be helpful but the expense of running additional independent facilities with all needed personnel might not make sense in a state with a population of only 1.2 million. I think expanding the current facility and recognizing that we need to do more autopsies, transport more bodies and increase the transportation budget makes the most sense.
We are currently in the preconstruction stages of a new ME/Crime Lab. Have a facility elsewhere but not yet operational. Would like to have another facility in northern part of state
Only 1 of 5 facilities above is state owned and operated. Need at least one more state owned, operated and staffed facility .
More autopsy tables--in process
University s building a new facility. We are looking at transferring some cases if our case load continues to increase.
None.
No current need. We have a new facility.
Facilities are small and need updating
We need to add digital capability to our x-ray equipment and upgrade our dictation in our branch facility
New Facility
Need more space, especially in terms of body and general (supplies, case materials, etc.) storage. Could stand to have a better isolation room system for toxic/hazardous cases
Additional office space.
None.
Main office is crowded with insufficient autopsy room space and equipment; not enough space for personnel or file storage, with insufficient employee and visitor parking space, located in a densely populated area of mixed residential and commercial neighbors. Our autopsy room exterior wall is shared with a tire warehouse, which presents a fire hazard which threatens the facility. Our campus is not large enough to allow us to grow at the present location.

Table 5. Equipment Needs Identified by State Medical Examiners

Equipment Needs
Live Scan Fingerprint
Need to replace current film x-ray system with digital. Need to upgrade HPLC to HPLC MS
MRI/CT
Nothing that I can think of.
The State Medical Examiner needs an updated case management system.
Digital X-ray for both regular X-rays and dental, Additional cameras
Digital X-ray system
Digital x-ray processor (this is out on bids).
New vehicles for investigators, slide scanner, a couple of new microscopes
Digital X-ray equipment
Our equipment at one branch facility is adequate. The equipment in the other facilities is inadequate-no x-ray, inadequate ventilation and lighting.
Body Lift Radiation Unit
All the basics are adequately covered. I am not convinced of the need for CT scanning, but it seems to be the rage these days.
CT scanner, dosimeter for radiologic monitoring, portable morgue and body storage unit, ophthalmoscope with camera for cavity work.
This office is in desperate need of additional autopsy tables: we have 2 autopsy tables in one morgue and only 1 functioning table in our branch morgue, to serve a state with 1.8 million people, and an annual autopsy caseload of 1500.

Table 6. State ME Perceptions of whether transport distances or transport costs impact on getting autopsies when they are needed.

Perceptions
The vast geographical expanse greatly impacts the decision to bring a case in and autopsy. There are limited road systems and most must be transported by private air, water and land systems. Costs range from $400 to $20,000/ body. However, if autopsy must be performed the body will be transported no matter what the cost and distance.
The State used to transport our bodies. When we stopped transporting a couple of years ago, the number of autopsies decreased.
No impact on doing autopsies. May engender one day delay in some cases.
No impact
There is no impact of which I am aware.
The Counties pay for autopsies and for transportation. Sometimes the transportation cost is more than the autopsy fee. When budgets are tight I am sure they have to consider cost when decided on ordering an autopsy.
Transport is arranged by the county coroner and comes from their budget. Some counties are 3+ hours away from a ME facility. I would not rule out that there are times when the county budget as well as driving distance factors into a Coroner's decision.
No impact
The cost for the transport of bodies is a major component of the budget. More important is having additional autopsy support staff.
I think it does play a factor: time, distance and transport costs
Each county coroner bears the cost of transportation. If investigation and physical findings indicate natural or accident in which autopsy is not sought they are responsible for documentation and tox collection/submission. State ME's are available for consultation in this process which may include emailed photographs.
Sometimes it does. Sometimes it doesn't. It's all dependent on the mind set of the local death investigative official(s).
Yes (Distance/cost does impact on decisions)
Costs for transportation are high. Autopsy performance is more a function of pathologist staffing inadequacies rather than transportation issues.
The cost to transport bodies over great distance definitely impacts our autopsy decisions. The counties have to pay funeral directors for transportation and are reluctant to do so unless it is clearly a homicide.
No
Transportation costs are significant but we have been able to meet our responsibilities to perform autopsies when needed/required.
Need additional funding to pay for transportation of all ME cases from the scene or the place of death to the location of examination. Currently, OCME only pays for autopsy body transport.
Body transportation is the biggest line item in my budget (not including personnel), on occasion transportation cost does play into the decision on whether a body is transported for view by a forensic pathologists.
These factors don't impact decision to autopsy.

Table 7. Areas for Improvement cited by State Medical Examiners

Areas for Improvement
law changes, staffing qualifications, facilities, getting pathologist to live in rural Alaska, getting ME staff outside of central location of Anchorage.
Law changes would be good, but it is doubtful whether that will ever happen. We do not have enough pathologists to cover most natural deaths and traffic accidents
Need to increase capacity in tox lab. Could use some more money. Definitely can't survive with less money. In terms of Board certified pathologists, we now have 5 but will have 4 next week. We need replacement and the sooner the better
Fine as of today.
A requirement in the Statutes that would mandate that elected coroners must report all deaths to the Medical Examiner's Office.
Currently our most serious needs are funding for staff, forensic pathologists and supplies. The other offices are in need of new facilities and equipment.
Funding, facilities, equipment are all areas for improvement.
Support staff, secretarial, autopsy, investigators, records, maintenance
Funding and additional support staff, particularly investigators and autopsy assistants.
funding, FP staffing, equipment
Need to build and staff facility in largest population city that is currently being served by a single private FP working fee-per case with separate billing from hospital facility and autopsy assistant. This project would require sole source funding from state dept. of justice or multi-county/state agreement. Would like to achieve 100% electronic submission of coroner reports.
Training of MEs Recruitment of physician MEs Increased funding. Increase ME/pathology fees
Need continuing education for local coroners and death investigators.
Staffing, funding. By demographic criteria we should have 4 FP but has remained at 2 since the inception of the agency in 1984.
Adequate budget for new facility utilities and service contracts and needed personnel.
Staffing, adequate funding, and our ability to efficiently handle cases in rural areas.
Funding drives all! If I had funding I would hire 2 more forensic pathologists and support staff. I would upgrade current facilities and build or remodel 2 more. Our law is adequate.
Additional qualified personnel.
General increase in funding needed. Per capita funding is a bit over $1.00 compared to national average of around $2.50. If we were funded at an "average" level, we could solve our staffing and other deficiencies.
24/7 direct case reporting to district offices, codes changes to address the use of the MLDI and specimen retention protection. Currently have adequate funding except for all ME body transport.
This system desperately needs expanded autopsy facility capacity.

Table 8. State ME perceptions of problems and/or benefits of utilizing local coroners or other non-pathologist or non-physician personnel.

Coroner and Local Assistant Information
We do have coroners, but in most cases, our investigators deal with the investigating agency. Coroners sign the death certificates and, occasionally, they are in discrepancy with the autopsy findings.
N/A
No coroners
There are occasions where cases that should be reported to the Medical Examiner are not reported by a coroner. This does not happen often, but too much judgment is left to the coroners in this regard, at the present time.
No coroners in the state. We currently have no significant problems.
Beneficial in that the county coroner is the investigative agent who goes to scenes, assists the families, and completes the death certificate to list but a few aspects. Coroners reside within each county therefore making medicolegal death investigations much easier (with only 4 regional ME offices, it would be virtually impossible to efficiently and effectively cover such a large area). Some issues may be attributed to training or relationships within a community. At times there are cases sent that should not be here and I am certain there are times when the opposite will apply. Overall the "problems" are minimal.
Having local physicians Medical Examiners allows cases to be examined and certified locally without transport to Augusta. Some of the MEs are excellent. However, many are poorly trained and do not have the experience to adequately examine or document cases. While we limit which cases are handled locally, this is definitely a problem area. The CME always has the option to override decisions of the local Medical Examiners as to the need for an autopsy and I/we do so if we are aware of anything unusual in an otherwise natural death (or MVA or other case handled by them).
We are a coroner based state and a regionalized mixed ME/Coroner system is my goal
MT code requires basic and continuing education for coroners with growing opportunities for electronic alternatives. Outcomes are primarily determined by individual coroner competence. Majority of our 56 counties are served by sheriff/coroners. Geography & population distribution precludes full time death investigators with in all but a couple counties.
We have occasional problems. Most local death investigators perform competently. The benefits are that we do not have to administrate problems with salaries, case investigation fees or transport fees. These are handled at the local level.
Our staff of investigators, trained by OCME, present all cases to the on-call FP for disposition.
Not applicable
Benefits include the ability to not have to transport bodies to one of the two main facilities for examination and tox specimen retrieval. Problems include inadequate training and experience of investigators and the cost.
N/A
Does not apply.
We have non-pathologist physicians in local communities who can do simple external exams and sign death certificates on selected cases. This helps keep cases which do not need an autopsy out but the level of documentation of findings in these cases is marginal. Do not have funding, staff or time needed to provide ongoing training and oversight needed to bring these doctors up to a good level of performance.
The number of Local MEs is constantly decreasing due to retirement with little interest from up and coming physicians and corporate medical prohibitions for outside employment. Local MEs frequently do not call in cases in a timely fashion and we must wait for reports by mail or email for district office notification of these cases. Training is always a problem as these private physicians serving as Local MEs have limited time for training despite bi-annual face to face sessions and online training.
We use local investigators mostly EMT and nurses trained by our office in death investigation. The level

Coroner and Local Assistant Information
of experience and confidence in their abilities is variable, but for the most part good. They are "paid volunteers" on a fee schedule when they do work for us. I would love to have some full time investigators, but....
We train and certify medical professionals representing full-time EMTs, paramedics, nurses and physicians, in medico-legal death investigation, as an in-state 3 day, 22 hour contact course, who need to pass a qualifying test for appointment for a period of 3 years; with a current roster of 122 local part time death investigators (County MEs) who work under State OCME direction, which is provided by 7 forensic pathologists and 7.75 FTE in-house investigators. Hard to maintain timely communications in a state with spotty cell phone service. To insure against County ME misbehaviors: all out-of-hospital death investigator death scene visits occur with police escort, to avoid allegations of misbehavior. Local death investigations are usually good, based on use of a comprehensive investigation form. Functioning local death investigators may complete DCs under State guidance, allowing cases to be certified locally, saving transport costs and protecting facility capacity.

Table 9. Other comments provided by State Medical Examiners

Other Comments
Will violate 325 maximum autopsy rule when down to 4 doctors
We benefit from having only 2 Chief Medical Examiners over the last 47 years.
Our current Medical Examiner cases are approximately 1200/year of which approximate 300 -350 are autopsied. The percentage should be higher particularly on the natural deaths and drug overdoses though I know many FPs would also feel that we should be autopsying all motor vehicle deaths, suicides, etc. We would obviously need additional pathologists and autopsy assistants (we have 1 1/2 autopsy assistant).
3rd FP in process of being hired, goal is to have 5
We should perform more autopsies, but at present are willing to forgo volume for better work on 250 cases per FP.
Our forensic pathologists do more than just autopsies. All have academic teaching activities and some grant funding for research activities. How do you factor in the autopsy numbers when the forensic pathologist is not an FTE? If one includes fellow autopsies supervised by staff MEs then their autopsy numbers do exceed 250 per year.
Toxicology services provided by state lab. Their funding and staffing is worse than ours leading to long turn around times and an inability to do testing for many drugs. We are having to send out samples to a commercial lab more and more which puts further strain on our budget.
We have been exploring the idea of morphing from a Local ME to an Medicolegal Death Investigator system.
From stories I hear from others, I think we are a well supported system overall.
We have 7 FTE forensic pathologist positions, including the chief position, who performs 0.8 FTE autopsy coverage (two positions provided by university department of pathology)for approximately 1500 autopsies per year. Rate limiting "step" for this office is the facility size and capacity.

General Conclusions

- Half of the state medical examiners perceive a benefit if additional autopsy facilities were available in the state
- 17 of the 22 state medical examiners feel that additional forensic pathologists would be beneficial
- 16 of the 22 state medical examiners feel that they are marginally or inadequately funded
- There are 63 autopsy facilities which serve the 22 states with facility numbers ranging from 1 to 12 per state
- In half of the states, bodies may need to be transported 200 miles or more for autopsy, and in 18 of 22 states bodies may need to be transported more than 100 miles for autopsy
- 127 board certified forensic pathologists work in the state medical examiner systems which also include 24 non-boarded forensic pathologists
- In half of the states, forensic pathologists autopsy load may exceed 250 cases per year per pathologist
- In three sates, forensic pathologist autopsy load may exceed 325 cases per year per pathologist
- Conversion to digital x-rays was the most commonly mentioned need
- Most states provided information suggesting that transport distances and costs do impact on decision to perform autopsies
- Facility needs and areas in need of improvement were fairly diverse among the 22 offices
- Perceptions about the benefits and drawbacks of using non-physician local assistance varied