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COVID-19 Decedent Management: MI-MORT in Action

The COVID-19 pandemic caused patient surges in healthcare facilities around the world, and as deaths increased many hospital morgues became overwhelmed by shortages of space and staff. Mass fatality plans are typically based on no-notice incidents (e.g., mass violence), rather than a years-long public health emergency like COVID-19. ASPR TRACIE met with the following healthcare experts from the State of Michigan (listed alphabetically) to learn more about how they overcame these challenges and quickly implemented solutions for managing human remains with dignity:

- **Jessica Gould**, Healthcare Preparedness Specialist, Michigan Mortuary Response Team (MI-MORT)
- **Linda Scott**, Director, Bureau of Emergency Preparedness, EMS and Systems of Care, State of Michigan
- **Lynn Sutfin**, Public Information Officer, Michigan Department of Health and Human Services

John Hick (JH)

What did decedent management planning look like in Michigan before the pandemic?

Linda Scott (L Scott)

MI-MORT is the Michigan Mortuary Response Team, modelled off the Disaster Mortuary Operational Response Teams, or DMORT. Many members of MI-MORT are also on the Region V DMORT team. Both teams have similar components. We continually include mass fatality and decedent care in our healthcare preparedness plans, and we also ask healthcare coalitions (HCCs) to focus on planning for mass fatality surge.

Jessica Gould (JG)

MI-MORT is comprised of volunteers. We use ASPR's Emergency System for Advanced Registration of Volunteer Health Professionals (ESAR-VHP), to maintain Michigan's Volunteer Registry.

L Scott

We keep our partners engaged through preparedness exercises; we just held one last week. As you know, medical surges can lead to an increase in demand for morgue services, and through our statewide bed capacity system we are always monitoring morgue capacity to identify capacity challenges.

JH

In Minnesota our mass fatality plan revolved around no-notice incidents, not long-term events like COVID-19. We do have decedent temporary storage, but the initial surge in COVID-19-related deaths led us to scramble to find another location with greater and long-term capacity.

L Scott

We used temporary cold storage trailers during the first COVID-19 wave but recognized that additional capacity might be needed. It is incredibly hard to find a building willing to be used to store decedents especially during a pandemic. We thought we had secured one location, but the site dropped out once the media covered the story. Simultaneously, we worked with our HCC leadership team who worked with their District Emergency Management Coordinator to identify buildings which could be used for cold storage. We ultimately found a storage location in southeast Michigan.

JG

We also deployed three Mortuary Enhanced Remains Cooling Systems, or MERCs, during the first wave, to a hospital, regional medical examiner's office, and the central storage warehouse identified. Two of the MERCs can hold 48 decedents. During the pandemic, we purchased another MERC that can hold 24 decedents. We also worked with the State Emergency Operations Center to obtain additional refrigerated trailers. The state currently has three MERC systems.

JH

How did you change your approach over the course of the COVID-19 pandemic?

JG

During the initial wave in 2020, we activated MI-MORT to support a centralized morgue facility and continued to monitor hospital status. By May or June of that year, we were able to stand down and demobilize that centralized site. During that time, we continued to identify additional services to support mass fatality management. Then, during the 2021 holiday season, it was evident that the hospital morgue capacity was falling again, so we contracted with a livery service to assist with remains management.

L Scott

One of our successes was the ability to make our MI-MORT volunteers temporary state employees. Doing so not only recognized their efforts but was significant in recognizing that they are away from their own businesses supporting state response. This also provided additional liability coverage. We were pleased that the process we had in place worked.

MI-MORT is the Michigan Mortuary Response Team, a multidisciplinary team which responds to mass fatality incidents in Michigan. This team of approximately 300 volunteers aims to aid county medical examiners, emergency managers, and public health across the state. MI-MORT assists with identification of victims in mass fatality incidents and identifies next of kin. MI-MORT is modelled after the Administration for Strategic Preparedness and Response (ASPR) Disaster Mortuary Operational Response Teams (DMORTs). MI-MORT serves Michigan when an incident occurs, and the fatalities overwhelm local resources. MI-MORT is a partnership between the Michigan Department of Health and Human Services (MDHHS), Bureau of Emergency Preparedness, EMS, and Systems of Care, and the Michigan Funeral Directors Association. As the program matured, it also partnered with the Michigan Dental Association Identification Team, Disaster Assistance Recovery Team, and Michigan State University's Forensic Anthropology and Forensic DNA Departments.

JH

Paying them and covering liability is very important, along with keeping their businesses going to keep those routine decedent management services active as well. Did you have strong existing relationships with the medical examiners and funeral directors, or did any challenges emerge?

JG

Yes, we have long-standing strong relationships with them, and we worked with them all along. We don't have a state medical examiner in Michigan, which is a separate challenge. Also, we didn't have all medical examiners or funeral directors in the state health alert network early in the pandemic. We did a survey of medical examiners and funeral directors across the state to determine needs, then called to follow up if there was no response. Since COVID-19 began,

I've presented to the Michigan Association of Medical Examiners (MAME) every year to build relationships and develop and maintain a current contact list. Now they know we are here to support them, too.

L Scott

Most of the medical examiners have grown to understand the role of the state and the framework of fatality support. This includes what the MI-MORT team is and isn't. Most of them are supportive, though we had challenges in the beginning. While very county has statutory responsibility to have a medical examiner, there are no standardized requirements or processes and there are lots of nuances between counties.

JG

While each county must have a medical examiner, multiple counties may share a medical examiner, which is fairly common in Michigan, particularly in rural areas. One medical examiner's office covers more than 14 counties. Resources vary, and memorandums of agreement are in place to support each other when needed.

JH

It's hard when there's no standardization. How do cases get handled when there are differences between counties? Who decides whether it is a case investigation or forensic investigation?

JG

Establishing manner and cause of death is covered in state statutes. That did not change during the pandemic. An executive order was enacted during the pandemic supporting the use of the MI-MORT and the livery service. MDHHS established the contract with the livery service. The medical examiner wasn't going to take jurisdiction over the decedent because it was death by a natural cause. The hospital was reluctant to lose or change custody of the decedent in their morgue, particularly during the first activation. The executive order clarified that the hospital maintained custody and the state was acting on their behalf. The livery service was actually an extension of the hospital when using this service.

The state compensated the livery service, taking the burden off the hospitals during the surge. Use of this service was a great lesson learned and has been integrated into the state mass fatality plan. The livery service area was concentrated in southeast Michigan. We currently don't have a livery service available in northern Michigan or the Upper Peninsula. Another important support in the southwest area of the state was a medical examiner associated with an academic center who functioned as a livery service. They assisted in offloading decedents from the hospitals in that area. To support them the state provided racks to help expand their capacity. We leveraged every component of our resources.

--Linda Scott

JH

COVID-19 did not pose contagious risks for those handling decedents, but a viral hemorrhagic fever (VHF) would be very different. Do you have plans for that?

JG

In 2015, in response to the Ebola outbreak in West Africa, Michigan developed a special pathogens response network, and all hospitals identified their tier level indicating their capability to care for patients with VHF. In addition to having hospitals that will care for patients throughout the course of their illness, we have identified teams at those hospitals that would assist with decedent care at another hospital if needed. We also have agreements with airports for transport out of state if needed and identified crematoria across the state for final disposition of those decedents with a VHF. The crematorium takes care of the transfer and disposition.

JH

Did you have any "ah-ha" moments during the pandemic?

JG

We hadn't planned for long-term events as much as short term or no-notice incidents. We also realized we need to plan for the longer-term events with regions statewide and have agreements in place for these scenarios. One example is

addressing the challenge of locating appropriate warehouse space in which we can store decedents if necessary and securing contracts before the need arises. This is now part of our HCC's annual workplan (note that they partner with emergency management during this process).

JH

Many headlines announced the use of ice rinks for decedent management. Can you explain why this is not a good idea?

L Scott

We were originally looking for refrigerated storage space but learned this was not feasible. Instead, we found warehouse space to deploy our MERCs, since it is tough to get cold storage then turn it into a decedent storage space. We did have one medical examiner who wanted to use an ice rink for storage; he was insistent that this was a viable option. In fact, it made the local news. We worked with him and other subject matter experts to communicate that this was not a reliable storage method due in part to inconsistent temperatures and potential degradation of the remains.

JG

In addition to unreliable temperatures, the ice isn't safe for employees. There is also an issue with community perception; people don't want to go back to the rink or play hockey in a place that has been used for remains management.

Lynn Sutfin (L Sutfin)

Media would hear that we were using a certain facility to store bodies, like ice rinks, and the story would get out of hand. It was problematic to worry about the location of these decedent management sites getting out to the media. At the same time, the media would hear things from the public then ask us to clarify; we had to emphasize that we were handling human remains with respect.

JH

Are the MERCs labelled?

JG

MI-MORT equipment trailers are labelled but the trailers that house the MERCs are not labelled.

JH

What is required in a MERC? Did you have to make adjustments?

JG

A Mortuary Enhanced Remains Cooling System has resources that are scalable and portable including a racking system. It can be placed in a building, a 53-foot refrigerated trailer, or smaller trailers based on the incident. Michigan purchased metal wheeled shelving to facilitate the movement and transport of the remains. These metal racks can hold a board, pan, or backboard. We are trying to address some challenges with the MERCs; the metal pans are very heavy, but that is what was available at the time. Also, not all hospitals have a loading dock with space for a 53-foot trailer. We will be modifying our 53-foot trailers to add a lift gate and thus ensure we can transport remains in and out of hospitals. We also needed to add lighting and install a flat, washable floor to make it easier to wheel the shelving around.

Our (MI-MORT) team planned for getting activated, but we hoped it would never happen. As with any deployment, we shared behavioral health resources from the state's StayWell program with volunteers, public health staff, clinicians, and coalitions.

--Jessica Gould

Many hospitals had unclaimed decedents in them for various reasons, which was part of the problem during the first wave. MI-MORT (including funeral directors who volunteer with the team) worked with families to get decedents to final disposition. A total of nine families were not able to arrange for final disposition, and MI-MORT worked with the State Emergency Relief program to arrange disposition. Our teams worked very hard to find next of kin and get everyone to final disposition.

--Linda Scott

L Scott

Historically, the Michigan medical and public health preparedness program has done a good deal of planning on fatality management, including surge capacity. All hospitals implemented their facility surge plans to maximize their space, however, the state process to locate additional warehouse space took longer than we anticipated, even though it was "expedited" working with our SEOC. As such, our Community Health Emergency Coordination Center (Health ECC) monitored morgue space more closely during subsequent waves of the pandemic.

JG

The amount of time it took to get the warehouse location under contract was about two weeks. Even though that's very fast to set up a government contract, it took longer than we thought it would, and because of that, we were behind.

JH

Was the livery service used for pre-hospital COVID-19 deaths?

JG

The use of the livery service was strictly reserved for the hospital. No EMS agencies used the livery services. We did have some challenges for those who died enroute; the jurisdiction was determined as the county the crew was in at the time of patient death. EMS managed their decedents using normal protocols.

JH

What's on the radar moving forward?

JG

We are updating all the plans to incorporate lessons learned during COVID-19. We are going back to basics on fatality planning and working with our regional HCCs to make information available to new hospital emergency managers. We are working to develop a specific mass fatality template for hospitals that new or seasoned emergency managers can use to build or strengthen their plans. As we know, knowledge is lost when there is staff turnover.

L Scott

We are one of the few states without an Office of the State Medical Examiner. We have been working to pass legislation to get a state medical examiner's office. COVID-19 changed things, but even before the pandemic it was difficult for preparedness coordinators to reach out to medical examiners. The goal for a dedicated state office would assist with standardized training requirements for medical examiners and medical examiner investigators. COVID-19 helped us demonstrate why this is so important and would benefit Michigan from the broad public health perspective.

JH

Are there cultural considerations we need to be thoughtful about planning for?

L Scott

Our MI-MORT team has a good deal of knowledge on specific cultural and religious considerations and final disposition practices and help guide actions when activated to respond to a fatality surge. It's important to communicate with families so they understand any adaptations necessary during response.