



State of Maryland

**Maryland  
Institute for  
Emergency Medical  
Services Systems**

653 West Pratt Street  
Baltimore, Maryland  
21201-1536

*Larry Hogan  
Governor*

*Clay B. Stamp, NRP  
Chairman  
Emergency Medical  
Services Board*

*Theodore R. Delbridge, MD, MPH  
Executive Director*

*410-706-5074  
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**State EMS Board / SEMSAC  
Annual Joint Meeting (virtual)  
January 12, 2021  
9:00am – 11:00am**

**Agenda**

- I. Call to Order - Mr. Stamp, EMS Board Chair; Mr. Tiemersma, SEMSAC Chair
- II. MIEMSS Report – Dr. Delbridge
  - Skilled Nursing Facility & Nursing Home Support – Mr. Linthicum
  - Communications Upgrade Project – Mr. Balthis
- III. MFRI – Mr. Cox
- IV. MSP Aviation Command – Major Tagliaferri
- V. National Study Center – Dr. Kozar
- VI. R Adams Cowley Shock Trauma – Dr. Snedeker
- VII. MSFA – President Walker, Ms. Tomanelli
- VIII. Old Business
- IX. New Business



**State EMS Board and SEMSAC  
Joint Virtual Meeting  
January 12, 2021  
Minutes**

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**Board Members Present:** Clay B. Stamp, NREMT P, Chairperson; Sherry Adams, Vice Chairperson; Sally Showalter; Stephan Cox; William J. Frohna, M.D.; James Scheulen, NREMT P; Dean E. Albert Reece, M.D.; Wayne Tiemersma; Mary Alice Vanhoy, RN; Dany Westerband, M.D.

**Board Members Absent:** Sherry Adams

**SEMSAC Members Present:** Wayne Tiemersma, Chairperson; Eric Smothers, Vice Chairperson; John Filer; Wynnee Hawk; Eric Smothers; Jeffrey Fillmore, MD; Michael Rosellini; Justin Orendorf; Tim Burns; Scott Haas; Murray Kalish, MD; Wayne Dyott; Tim Kerns; Mark Scarboro for Rosemary Kozar, MD; Kathryn Burroughs; Jim Matz; Jennifer Anders, MD; Karen Vogel; Brian Frankel; Linda Dousa; Michael Millin, MD; Michael DeRuggiero; Melissa Meyers; Lisa Tenney; Jeffrey Sagel, DO; Michael Cox; Kathleen Grote; Habeeba Park, MD

**SEMSAC Members Absent:**

**MFRI:** Mr. Cox

**MSPAC:** Major Tagliaferri

**NSC:** Mr. Scarboro for Dr. Kozar

**MSFA:**

**MIEMSS:** Dr. Delbridge; Ms. Gainer; Ms. Abramson; Ms. Aycocock; Mr. Balthis; Dr. Bailey; Mr. Bilger; Mr. Brown; Ms. Chervon; Dr. Chizmar; Mr. Fiackos; Mr. Legore; Mr. Linthicum; Ms. Mays; Mr. Buckson; Mr. Naumann; Mr. Seaman; Ms. Wright-Johnson; Ms. Goff

**OAG:** Mr. Magee; Ms. Sette.

Mr. Stamp called the roll.

Chairman Stamp thanked our EMS partners -- MSFA, MFRI, MSPAC and RACSTC -- for their commitment in serving the citizens of Maryland. He also thanked Dr. Delbridge and the MIEMSS leadership and staff for the excellent work each day to achieve our goals. Mr. Stamp welcomed and thanked the SEMSAC members for their extraordinary work on the development of the EMS Plan and for being the eyes and ears for the EMS system.

**MIEMSS Report**

Dr. Delbridge shared the sad news of the passing of John Chew on January 10, 2021, a friend and leader in the EMS community. John was the EMS Administrator at the National Highway Traffic Safety Administration. After retiring from NHTSA, John became the Director DES in Queen Anne's county. John will be missed.

### COVID-19 Updates

Dr. Delbridge said the number of acute care beds occupied by COVID-19 patients increased from 1663 hospitalizations on December 8, 2020, to 1952 this morning. Currently, hospitalized COVID patients account for approximately 24% of acute care patients and 40% of ICU patients. This is creating challenges in managing space for patients who need to be hospitalized and puts stress on the hospitals and the EMS system. There is a threshold of 8,000 occupied beds in Maryland, at which point hospitals would implement surge plans to increase bed capacity by 10%. Every hospital submitted surge plans for increasing capacity. The total number of in hospital patients this morning is 7,255.

Dr. Delbridge said that MIEMSS continues to track the number of PUIs transported by EMS and the number of PUI contacts by EMS public safety and commercial services. He said that at the Board meeting in December, PUIs hovered around 200 per day over a 28-day period. He said over the last 28 days, the number of PUIs averaged around 300 per day which accounts for 20-25% of daily EMS activity across the state. Dr. Delbridge said that trending still shows an approximate nine-day lag between the EMS encounters and the increase in hospitalizations of COVID patients. This analysis was produced by Dr. Matt Levy (project lead and a MIEMSS Regional Medical Director), Dr. Chizmar, staff at Johns Hopkins and MIEMSS' Data team.

Dr. Delbridge said that EMS clinicians continue to follow the COVID-19 triage protocol for confirmed COVID patients, but some clinicians need better documentation of use of the protocol. There is a 1% hospitalization rate when the protocol is followed which is better than the return rate for most hospital emergency departments. MIEMSS is reviewing a subset of cases that were not well-documented, where patients did not go to the hospital. MIEMSS believes Maryland is leading the nation in this regard and anticipates developing a publication on the topic.

### Yellow Alerts

Dr. Delbridge said the recent numbers of Yellow Alert hours have increased significantly and are above the number of Alert hours during the same period last year. Jurisdictional EMSOPs across the state are forming their own strategies for dealing with crowded Emergency Departments, including overriding alert statuses, deploying duty officers to oversee ambulance destinations, and transferring care in ED waiting rooms. Within reason, EMSOPs expect hospital EDs to accommodate patients within 30 minutes.

Dr. Delbridge said that one in every ten EMS transfers of patient care to Emergency Department personnel takes over 80 minutes. He said that MIEMSS is working with some hospitals and EMSOPs to encourage the transfer of low acuity patients to the ED waiting room staff to be placed in the queue with other ED waiting room patients. Dr. Chizmar has been providing a weekly report to a subset of hospitals that have expressed interest in knowing their performance in this regard and have made notable improvement in their turn-around time.

### MIEMSS' @HA (Ambulances at Hospitals Dashboard)

Dr. Delbridge provided screen shots of the @HA Dashboard from this morning's @HA web service and phone App showing locations of ambulances at hospitals. At this time, a few jurisdictions still cannot be viewed due to variations in CAD feeds to MIEMSS. Depending upon the jurisdiction, some major system software updates would need to be made. This App gives a real time awareness of how many ambulances are at an ED. MIEMSS' IT/Data personnel continue to work with Apple on the app for the IOS platform. Barring any additional requirements from Apple, MIEMSS anticipates having the Apple App within the next few months.

### Chesapeake Regional Information System for our Patients (CRISP)

Dr. Delbridge said MIEMSS continues to work with Chesapeake Regional Information System for our Patients (CRISP) on an App for an Emergency Department Advisory based on ED patient census. This is planned to be accomplished in two phase; the initial phase, which CRISP is currently working on, to assure reliable data feeds from emergency departments; and the operational aspect of placing the information on a usable platform agreed upon by emergency department staff. This information may vary depending upon the hospital objectives. MIEMSS anticipates piloting this in April 2021.

### Terminated Resuscitation COVID-19 Testing

Dr. Delbridge said that an emergency protocol permits a BLS or ALS clinician to perform nasopharyngeal testing for COVID-19 after termination of resuscitation in the field if the deceased person is not anticipated to be a medical examiner's case. This protocol alerts for possible EMS exposures and facilitates contract tracing by MDH. COVID-19 cases in Maryland are currently around 9%. Test positivity rates amongst terminated resuscitation of cardiac arrest cases in the field for December were 20% and thus far, January is over 25%. The daily cardiac arrests are up over 25% in Maryland from 2018 and 2019.

### Clinical Externs

Dr. Delbridge said that, using the online licensure system, MIEMSS has processed over 1000 Clinical Nurse Externs and just shy of 100 Clinical Respiratory Externs. Since the school semester has ended, externs are upgrading their levels of qualifications. These personnel augment the existing hospital workforce. MIEMSS is sending the list of clinical externs to hospitals weekly.

### EMS Clinicians

Dr. Delbridge gave an update on the number of Provisional EMS licenses and certifications and clinicians applying for full licensure status. He said that over 200 provisional clinicians have converted to full status.

### Critical Care Coordination Center (C-4)

Dr. Delbridge said that MIEMSS is facilitating communications for the referral and transfer of patients needing ICU care from hospitals without sufficient ICU capability to other hospitals with ICU bed availability. So far, MIEMSS has taken 370 calls, worked with 49 requesting and 39 receiving hospitals.

MIEMSS is contracting with Intensivists across the state to assist with coordination. We have learned that approximately 25% of the requests can be handled within the requesting hospital with an online intensivist assisting the requesting physician.

Dr. Delbridge shared the list of the top referring and receiving hospitals, including out-of-state hospital referrals. He said that one of the top referring hospital is also a top receiving hospital.

## Vaccinations

Dr. Delbridge reminded everyone of the Executive Order issued in March 2020 suspending certain provisions in the Education Article and COMAR Title 30. Guidelines were sent Maryland EMS agencies on what was need to provide vaccination services under the Order. Dr. Delbridge said that approximately half of the state's EMS agencies have plans that MIEMSS has approved for COVID-19 vaccinations. Plans include occupational vaccinators, vaccinating their own people, or as facilitators of vaccination working with health department. The EMS Board and MIEMSS issued a public notice enabling Paramedics to become vaccinators. After many discussions and careful, arduous consideration, MIEMSS is developing a training module for EMTs to become vaccinators.

MIEMSS will open a vaccination clinic for state and allied agency frontline employees. The pilot run is later this week.

## Ketamine

Dr. Delbridge said that Dr. Chizmar has been reviewing all of the Ketamine use cases. He said that in the last two years, Ketamine has been used 2500 times in Maryland, with very geographically disparate use, mostly based on the availability of ketamine to the EMS jurisdictions. Approximately 51% of ketamine use is for pain control, about 34% administered as part of airway control and around 15% usage for situational sedation of a patient. The situational use of ketamine cases are carefully reviewed to assure that EMS is not facilitating some adverse event that was unpredicted based on the patient's clinical condition prior to the administration of ketamine. Guidance was sent to EMS operational programs stating that medical control is required when using ketamine for sedation and can only be administered when eminent danger to the patient or EMS clinicians and law enforcement officers taking care of the patient. It is prohibited for EMS clinicians to take direction from law enforcement on the administration of ketamine.

## Legislation

Dr. Delbridge said hospital responsibility to report possible COVID-19 exposures to EMS personnel currently falls under the Governor's Emergency Order. The Governor has proposed to make this a permanent change as part of his legislative agenda.

SB078 - This bill prohibits a law enforcement officer from administering ketamine to an individual or directing an emergency medical services (EMS) provider to administer ketamine to an individual. An EMS provider may administer ketamine to a severely agitated individual if (1) the individual is combative, violent, and represents an immediate danger to the individual or others and (2) the EMS provider first obtains "medical direction," with a specified exception.

SB67 – This bill is MIEMSS departmental legislation. The bill permits paramedics to administer vaccines included in the CDC's recommend immunization schedule or authorized for emergency use by the FDA; and TB skin testing. Vaccine administration / TB skin testing must be part of a public safety or commercial EMS service occupational health program or a population health outreach effort conducted by a county health department or Maryland hospital / health system.

SB389 - This bill modifies the requirements for Medicaid reimbursement to an emergency service transporter for services provided in response to a 9-1-1 call. Specifically, the bill requires Medicaid reimbursement for services provided to a Medicaid recipient in response to a 9-1-1 call in situations when the recipient is not transported to a facility. In addition, beginning in fiscal 2022, the Maryland Department of Health (MDH) must increase the amount of reimbursement for transportation and medical services by \$25 each fiscal year until the reimbursement rate is at least \$300.

### EMS Plan Vision 2030

Dr. Delbridge said that although the Vision 2030 document is online, to please contact Barbara to request a hard copy.

### Maryland COVID-19 Crisis Support Program

Mr. Linthicum said that the Maryland COVID-19 Crisis Support Program was developed in the wake of COVID-19 outbreaks in long-term care facilities. Facilities were unprepared with lack of training, PPE and continuity of operations. These facilities, even if they had continuity plans, were overwhelmed.

Skilled nursing facilities staff are among the lowest paid workers within the healthcare system. Staff stress was extremely high due to staff shortages, fear of taking COVID-19 home to families, dealing with irate family members of residents, death of co-workers and long-term residents in their care.

Mr. Linthicum said that as issues arose, MIEMSS worked with the International Critical Stress Foundation (ICISF) and the Workplace Trauma Center to develop a program concept. Funding was secured by working with MDH and BHA and implementing a contract with the Workplace Trauma Center for 24/7 access to virtual mental health crisis support. Licensed mental health clinicians that are CISM-trained and have significant experience dealing with a crisis provide program services. Services are free and confidential that include management consultation, wellness/stress management, critical incident stress management, group and individual counseling services, and bereavement coaching.

MIEMSS Field Operations Staff provide on-site facilitation as needed through a Google request form or through contacting EMRC/SYSCOM.

Mr. Linthicum reported that as of today, over 1900 people have received services with over 300 individual sessions and over 100 group sessions. MDH has extended the program through June of 2021.

Mr. Linthicum said that an additional program in partnership with ICISF, providing mental health training and support to state employees and Fire/EMS.

### Communications Upgrade Project

Mr. Balthis gave an overview of the history and implementation of the Communications Upgrade Project. He said that the core phase upgrades the existing EMS communications system from analog, circuit-switched technology to modern IP-based, packet-switched technology and replaces obsolete, unsupported equipment. This project mitigates known risks and improves system reliability.

Mr. Balthis said current efforts included phase #1 implementation in Region V. A 30-day parallel operation must be completed without interruption before closing phase #1. He said that MIEMSS anticipates completion of phase #1 in by June 2021. Phase #2 in Western Maryland and Region III have begun site visits to determine microwave line of site and adequate space availability for equipment delivery.

Region IV is in phase #3 of the project.

**MFRI**

Mr. Cox gave an overview of MFRI's accomplishments in 2020 and the mission, which now includes all hazard responses and vision for 2021. He said that MFRI developed a 5-year strategic plan and thanked the system partners for their participation. He reported on MFRI's 2020 statistics regarding student enrollment and the disciplines and programs in which MFRI participated. He said that, due to COVID-19, student enrollment decreased by 9,000 students and there were 700 fewer programs in 2020 .

Mr. Cox highlighted items in MFRI's 2020 operating budget and the Western Maryland Regional Training Center renovation project, which includes remodeling the burn building and the first Pearson/Vue testing center. Mr. Cox said that MFRI anticipates completion of the project during the summer of 2022.

Mr. Cox provided an overview of MFRI's COVID-19 response. He said that with the MSFA's assistance, MFRI's EMS/Fire/Rescue training was deemed essential and was exempt from the stay at home order. He said that classroom training is through Zoom and in-person practical training is limited to 9-students per 1-instructor. Venues that allow for more students (socially distanced) are now being used. All University faculty is COVID tested at least once per month. Mr. Cox thanked Dr. Fillmore for his assistance with COVID testing.

Mr. Cox gave an overview of the current and future EMT curriculum. He said that the pass rates for the pilot-enhanced EMT programs for the 1st round testing is 80%, 2nd round testing is 83%, and 3<sup>rd</sup> round testing is 90%. Cadet classes (2) show a 56% success at National Registry testing. He added that MFRI has administered 875 EMT and EMR tests since becoming a Pearson Vue authorized test center.

Mr. Cox said that the Assistance to Firefighters Grants award provides new tools, equipment props and personal protection equipment to MFRI training centers statewide. He gave an overview of the equipment purchased with the \$500,000 grant. In addition, MFRI secured an additional \$100,000 from the Assistance to Firefighters FEMA grant for assistance procuring COVID-19 supplies.

Mr. Cox said that moving forward MFRI intends to revise the current instructor recruitment and selection process, implement new technologies based on emerging issues facing emergency responders, implement a new information sharing platform and reorganize MFRI's organizational chart.

## **MSPAC**

Major Tagliaferri reported on the Maryland State Police Aviation Command's 2020 mission data, EMS Education Programs, current numbers of EMS providers and pilots, personnel recruitment strategies, and ongoing projects and initiatives including the completion of the Helicopter Basing Study. He said that COVID-19 caused a reduction in the overall number missions performed in 2020, except law enforcement / homeland security missions, which were up in 2020.

Major Tagliaferri gave an overview of a few of the standout missions accomplished in 2020 including Troopers 2, 6 & 7's response to St. Mary's County for mass casualty incident stemming from a crash involving a dump truck; MSPAC flew six patients to area trauma centers.

Major Tagliaferri said that community outreach was curtailed due to the pandemic, but MSPAC is adapting and evolving with virtual programs.

Major Tagliaferri reported said the MSPAC logged 359 flight hours in the Flight Training Device in 2020. MSPAC continues seek advanced aviation training device certification through the Federal Aviation Administration.

Major Tagliaferri said that MSP is conducting Vaccination Clinics for law enforcement at Martins Airport and anticipates holding two clinics per week. He said that plans were being developed for deploying clinics in Frederick and St. Mary's counties. Major Tagliaferri thanked MIEMSS and partners for their guidance using medics in preparation and planning of the vaccine clinics.

### **National Study Center (NSC)**

Mr. Scarboro gave an overview of the 2020 NSC research projects for the Maryland Highway Safety Office, the National Highway Traffic Safety Administration and the Centers for Disease Control and Prevention. He said the Crash Injury Research and Engineering Network is grant funded by NHTSA. Investigators are back in the field investigating causation in late model passenger vehicle crashes after a hiatus due to the pandemic.

Mr. Scarboro said that in collaboration with UMMC and RACSTC, the NSC Center for Innovation in Clinical and Translational Shock and Injury Research (CISIR) working on the continuum of care for injury. In time, this will allow for a complete injury picture for the state of Maryland.

The NSC is working on COVID positivity in trauma patients at time of presentation as an add-on to the toxicology study that recently showed drug prevalence was higher in road users, particularly drivers, during the public health emergency; with 64.7% testing positive for at least one active drug compared to 50.8% before the public health emergency began. The report <https://rosap.ntl.bts.gov>

Mr. Scarboro said that the Transportation Health Initiative (THI), a partnership with the Maryland Transportation Institute at College Park, combines expertise and resources in Engineering, Epidemiology and Medicine. He said Dr. ChenFeng Xiong has joined the THI team to continue the development joint projects and grant submissions.

Mr. Scarboro also highlighted the STAR funded internal grant to understand the changes in travel behavior after recovering from injuries caused by motor vehicle crashes using a smartphone app to track driving behaviors of patients discharged after trauma care.

Dr. Reece gave a brief history and evolution of the Shock Trauma (STAR) of which the NSC is a part.

### **RACSTC**

Dr. Kristie Snedeker highlighted the RACSTC's second quarter statistics on patient admissions, occupancy rates, OR volumes, clinic volumes and Lost Interfacility Transfer volumes. Dr. Snedeker said that average length of stay is four days. The hyperbaric chamber hours are down.

Dr. Snedeker said that since the beginning March 2020, the combined LRU/BCU has managed 61 COVID-19 ECMO patients, of which seven remain on ECMO. Of the remaining 54 patients 22 died, 32 have survived off ECMO (27 have been discharged to rehab/home and five remain hospitalized). The COVID-19 ECMO in-hospital mortality rate is 41% (ELSO registry COVID-19 ECMO mortality rate 45%) During the same time-period, the LRU/BCU also managed fifteen non-COVID ECMO patients, of which one remains on ECMO. Four of the 14 patients died and ten have survived off ECMO (six have



been discharged to rehab/home and four remain hospitalized). Non -COVID ECMO in-hospital mortality rate is 40%. The capacity of the LRU/BCU will expand as COVID-19 case volumes increase. She added that bed capacity has increased from six to 12 beds for ECMO.

She summarized the RACSTC Go-Team missions, noting that there had been five Go-Team requests with one deployment to Cecil County. She said that Organ and Tissue donations are down to about 57% and that due to COVID-19 most Observation and Outreach Events were suspended. EMS clinical rotations resumed in December 2020.

Dr. Snedeker announced the RACTC Gala will be held virtually on April 15, 2021 from 7pm – 8pm.

## **MSFA**

Executive Director Tomanelli sent greetings from the President, VPs and members of the MSFA and wished everyone a Happy New Year. She said the MSFA held first quarter Executive Committee meeting on January 9, 2021, and thanked the partners for their reports. The next Executive Committee meeting is scheduled for April 10 & 11, 2021; if allowed in person, it will be held at East New Market Fire Company in Dorchester County.

Ms. Tomanelli said the MSFA is pleased with the positive effects on recruitment and retention because of everything MIEMSS has accomplished with the recertification and licensure program during the pandemic. The MSFA thanks MIEMSS for their guidance to the volunteer clinicians with licensure and with the vaccine distribution.

Ms. Tomanelli said that the MSFA is grateful for MFRI's continuing to provide education and the construction of the new facilities.

Ms. Tomanelli added the MSFA leadership is available during this legislative season to provide written and virtual testimony. Staff will be at 17 State Circle in Annapolis.

Annual MSFA Convention planning continues for either in-person or virtual education.

Mr. Stamp thanked Ms. Tomanelli and asked her to convey the Board's thanks to the MSFA presidents and membership, as the volunteer fire services are the cornerstone of our communities across the state and that it is a priority of the EMS Board to support our volunteers.

**Old Business – N/A**

**New Business – N/A**

Mr. Stamp thanked all in attendance.

The joint meeting of the EMS Board and SEMSAC adjourned by acclamation.