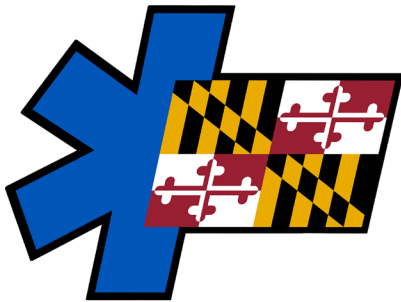


Maryland EMS News



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For All Emergency Medical Clinicians

August 2020

Field Work Provides Real-World Experience for Provisional EMT



▲ Alexa Welch, a sophomore at Towson University, is a Provisional Emergency Medical Technician with Butler Medical Transport in Towson.

EMS CLINICIANS WERE AMONG THE first Marylanders to witness the severity and scope of the global COVID-19 pandemic when it extended its reach into Maryland in March 2020. In an effort to both reinforce and bolster the ranks and readiness of the state's emergency medical services personnel, the Maryland Institute of Emergency Medical Services Systems (MIEMSS) began issuing Provisional Licenses/Certifications to EMS clinicians licensed in other states, students currently enrolled in EMS educational courses, and

We hope that all provisional EMS clinicians will desire to remain a part of Maryland's EMS system.

DR. TED DELBRIDGE
MIEMSS Executive Director

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National Child Passenger Safety Awareness Week 2020

Love comes in many shapes and sizes.



[NHTSA.gov/TheRightSeat](https://www.nhtsa.gov/TheRightSeat)



EVERY 32 SECONDS IN 2018 IN THE US, one child under the age of 13 in passenger vehicle was involved in a crash, with nearly two children a day losing their lives. Car seats, boosters, and seat belts are highly effective at preventing most deaths and serious injuries.

September 20-26, 2020 is National Child Passenger Safety Awareness Week

- social media materials available from NHTSA: <https://www.trafficsafetymarketing.gov/get-materials/child-safety/child-passenger-safety-week>
- Maryland's Seat Check Saturday (virtual version!) on September 26. Sign up for an appointment after September 7 at <https://bit.ly/2QmN5sq>
- Online CPS caregiver workshops. Email cps@mimss.org for more information

Maryland Survivor Benefits Program

THE MARYLAND DEPARTMENT OF PUBLIC SAFETY AND CORRECTIONAL SERVICES provides for a one-time payment of death benefits to the surviving spouse, child, dependent parent, or estate of an individual who, after January 1, 2006, died as a result of performing assigned duties for a qualified Maryland Public Safety Organization. Benefits are also available to the qualified surviving family member(s) of Maryland residents who died in service in the US Armed Forces in Afghanistan on or after October 24, 2001, or in Iraq on or after March 19, 2003.

The Line of Duty Death Benefit is found in the Code of Maryland Regulations, often referred to as COMAR, which is the official

compilation of all administrative regulations issued by agencies of the state of Maryland. In accordance with COMAR 12.11.06.02-.03, eligible beneficiaries include the estate or qualified family members of a Maryland Law Enforcement Officer; Correctional Officer; Volunteer or Career Firefighter or Rescue Squad Member; State Fire Marshal or Deputy State Fire Marshal; Public Safety Aviation employee; Hazardous Material Response Team member; and certain members of the Armed Forces who die in the performance of duties.

The benefits include funeral expenses where the State of Maryland provides up to \$10,000 to cover funeral expenses for qualified beneficiaries and a Flag Benefit where the

Secretary of State shall issue a State flag to the family of a firefighter, police officer, member of the military, sworn member of the office of State Fire Marshal, or professional or volunteer emergency medical services clinician who is killed in the performance of duty.

In order to file a claim, claimants may contact the Maryland Department of Public Safety and Correctional Services, Office of the Secretary at (410) 339-3783, or send an email to survivor.benefits@maryland.gov for information on how to begin a claim. ■

Management of Exertional Heat Illness (EHI) Protocol

WITH THE LATEST UPDATES TO THE MIEMSS statewide medical protocols, there have been significant changes in the delivery of care that all levels of EMS personnel will take when faced with an Exertional Heat Illness (EHI) case which is being actively cooled onsite by a Licensed Athletic Trainer or other onsite healthcare clinician.

As society reacts to the impact of COVID-19, Athletic Trainers are actively preparing to help athletes of all ages prepare for a return to sports. A critical area of this return is the cardiovascular readiness of athletes. With athletes being out of competition and formal practice for such a prolonged time, their conditioning and physical stamina has been greatly impacted. A deconditioned athlete, coupled with our current weather patterns and extreme heat, make this the optimal time for the Maryland EMS system to recognize the role of athletic trainers in EHI management.

Our state has been the site of several high profile EHI events in the last 10 years, and the Maryland Athletic Trainers' Association (MATA) has continued work to improve the pre-hospital care of EHI. This year, MATA has worked with MIEMSS to educate and advocate for the care of these patients. Working with MIEMSS and our emergency medical physicians brought about the 2020 protocol update. MIEMSS has updated the 2020 Environmental Emergencies: Heat-Related Emergencies protocol:

If active cooling is in progress by a team/event physician or athletic trainer, allow cooling to continue prior to making an attempt to transport until the patient has an improved mental status or the temperature has decreased to 102 degrees F or less. If any disagreement in the patient care plan occurs, contact a base station for an online medical consultation. (NEW '20)

This allows active cooling when initiated by a certified athletic trainer or other healthcare clinician to continue until the core body temperature is below 102 or we see other clinical indications of improvement from the EHI. Exertional heat illness

is a survivable condition when managed with active cooling onsite.

MATA met with MIEMSS officials to share research that has been conducted around the country showing that active cooling onsite of the incident is the gold standard for reducing body temperature

and making EHI a survivable condition. Evidence shows that a prolonged period of core body temperature over 102 significantly increases morbidity and mortality. Working with key stakeholders in

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MIEMSS Visits Smith Island



▲ MIEMSS staff visited the Ewell Volunteer Fire Company to discuss the delivery of EMS care on the island. Pictured are (left to right) MIEMSS EMS Region IV Associate Regional Administrator Michael Parsons, Director of Regional Programs Andrew Naumann, and State EMS Medical Director, Dr. Tim Chizmar. [Photo courtesy of Eltonio T. Collins]

MIEMSS STAFF RECENTLY VISITED Smith Island, in Somerset County. State EMS Medical Director, Dr. Tim Chizmar, Director of Regional Programs Andrew Naumann, and MIEMSS EMS Region IV Associate Regional Administrator Michael Parsons were accompanied by Somerset County's Highest Jurisdictional Official Eltonio "Tim" T. Collins.

Smith Island is an island in the Chesapeake Bay, on the border of Maryland and Virginia territorial waters. Both Maryland and Virginia claimed Smith Island until the dispute was settled in 1873. The Maryland-Virginia state line

runs through the island chain. On its Maryland side, Smith Island is a census-designated place in Somerset County. The three-by-five-mile island chain has three villages. The island is only accessible by boat. Passenger ferries to Smith Island leave from Crisfield, Maryland, for the 45-minute ride.

The group visited with Steven Dunlap, Melissa Evans, and Janet Tyler of the Ewell Volunteer Fire Company to discuss the challenges in providing emergency medical care in this remote area. There are currently two EMTs on the island that serve a population of approximately 200 year-round residents. ■

MDERS Collaborates with Regional Fire and Rescue Departments to Develop COVID-19 Disinfection Processes

COVID-19 DELIVERED MANY CHALLENGES FOR FIRE, EMS, AND RESCUE SERVICES. Those challenges included frequent updates to the medical protocol, department calculations of the correct personal protective equipment (PPE), and adjustments to how personnel should respond to incidents. The unprecedented speed and volume of information identified daily needs and gaps.

One primary challenge was the ability to maintain PPE inventory. This was a critical objective for the Montgomery County Fire and Rescue Service (MCFRS) and Prince George's County Fire/EMS Department (PGFD). Both departments recognized the demand for N95 masks, face shields, and goggles. The challenge was to procure and supply continuous inventories of these PPE supplies to meet call demand.

MDERS has previously assisted both departments to formulate cohesive capabilities to address emerging infectious diseases. The products from that project included PPE supplies, equipment, and decontamination training. One of the key resources delivered was the BioQuell disinfection system. The product uses vaporized hydrogen peroxide to sterilize surfaces that have been exposed to emerging pathogens. Several studies showed this technology to be effective in decontaminating PPE masks exposed to COVID-19.

Both fire departments recognized this disinfection tool as an

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▲ MCFRS Firefighter Paramedic 3 Brent Miller (left) and PGFD Paramedic Stephen Chagnon exchange information about the BioQuell disinfection process. Early in the process, both departments recognized the need to develop a local disinfection process. Communication was constant during the entire cycle, including a daily briefing during the initial phase. Issues identified and resolved included mechanical issues with filters, solution storage for the unit, and identification of a vendor as a single point of contact.

September is National Preparedness Month

NATIONAL PREPAREDNESS MONTH (NPM) is recognized each September to promote family and community disaster planning awareness both now and throughout the year. As we all continue to respond to the COVID-19 pandemic, it is even more important to be involved this September.

The 2020 NPM theme is “Disasters Don’t Wait. Make Your Plan Today.” Each week has a theme regarding preparedness for you and your community.

■ **September 1-5: Make a Plan.** Talk with your friends and family about how you will communicate before, during, and after a disaster. Make sure to update your plan based on the Centers for Disease Control (CDC) recommendations due to COVID-19.

■ **September 6-12: Build a Kit.** Gather supplies that will last for several days after a disaster for everyone living in your home. Do not forget to consider the particular needs each person or pet may have in case you must evacuate quickly. Update your kits and supplies based on CDC recommendations.

■ **September 13-19: Prepare for Disasters.** Limit the impacts that disasters have on you and your family. In Maryland, you should “Know Your Zone.” Go to the Maryland Emergency Management Agency (MEMA) website, <https://memm.maryland.gov/> and follow the four steps:

- ◆ *Step 1:* Click the “Find Your Zone” button;
- ◆ *Step 2:* Enter your address on the map;
- ◆ *Step 3:* See your zone in the search results;
- ◆ *Step 4:* Evacuate your zone if told to do so by local officials. Evacuation zones are designated as A, B, or C. The use of tiered evacuation zones decreases the possibility that roads will become overwhelmed with heavy traffic by spacing out the traffic load throughout the evacuation period. Nineteen localities participate in the program, including the City of Annapolis, Baltimore City and the Town of Ocean City. They are in place across coastal counties in Maryland, as well as in Prince George’s County. In the event of a severe storm event, residents of certain zones may be directed to evacuate depending on tides, storm intensity, path, and other factors. By understanding the risk of disasters in our area, we can act fast if there is a local warning or alert.

■ **September 20-26: Teach Youth About Preparedness.** Talk to children about preparing for emergencies and what to do in case they are separated for parents or caregivers. Reassure them by discussing how they can get involved. ■



KN-95 and Non-NIOSH-Approved Respirators - Removal of FDA Emergency Use Authorization

THE FEDERAL DRUG ADMINISTRATION (FDA) has revised and reissued the emergency use authorizations (EUAs) for Non-NIOSH-Approved Filtering Facepiece Respirators several times (April 3, 2020; May 7, 2020; June 6, 2020; with most recent update on August 11, 2020). The emergency use authorization for respirators primarily pertains to KN-95 and similar model respirators imported from China.

Specifically, the FDA is concerned that some of these respirators may not provide consistent and adequate respiratory protection to healthcare personnel exposed to COVID-19 based on additional filtration performance

testing conducted by the National Institute for Occupational Safety and Health (NIOSH). The respirators that failed testing should not be used in clinical situations that call for a NIOSH-tested N-95 respirator. However, the KN-95 (or similar model) respirators that have been removed from the EUA may be used as simple face masks.

Prior to the FDA's revision of these EUAs, departments may have purchased KN-95 or Non-NIOSH-Approved Filtering Facepiece Respirators or received them from MIEMSS. All agencies that received these masks from MIEMSS have been notified. Please check

your supply of respirators to ensure that any non-FDA-approved products are either removed from stock or re-labeled for use as simple face masks. Guidance for re-labeling the affected respirators may be found on page 5 in the Face Mask Umbrella EUA at <https://www.fda.gov/media/140894/download>.

A complete listing of authorized and non-authorized Non-NIOSH-approved respirators is available on the FDA website at <https://www.fda.gov/medical-devices/coronavirus-disease-2019-covid-19-emergency-use-authorizations-medical-devices/personal-protective-equipment-euas>. ■

MDOT MVA Reminds Motorists to Buckle Up - Every Seat, Every Ride

AFTER SEEING A DECLINE IN RECENT months due to Maryland's COVID-19 State of Emergency, motor vehicle traffic volumes now continue to rise toward pre-pandemic levels. As travelers return to the roads, the Maryland Department of Transportation Motor Vehicle Administration's (MDOT MVA) Highway Safety Office is reminding motorists that their first line of defense against injury in a crash is buckling up – every seat, every ride. Increased enforcement for seat belt violations is currently underway across the state.

In an educational video, MDOT MVA's newly redesigned rollover simulator demonstrates the drastic difference a properly buckled seat belt can make in a rollover crash. The video (which may be viewed at <https://bit.ly/3hfge4P>) shows three scenarios using a crash test dummy to represent a driver: properly buckled, improperly buckled (with the seat belt underneath the arm), and unbuckled. While the video demonstrates the potential outcome for the driver, the result of each scenario is attributable to every seat in a vehicle or truck. Unbuckled occupants can become projectiles during a crash, causing serious injury or death to themselves and other occupants. Seat belt use is also the law in Maryland; for any passengers older than 16 are not wearing a seat belt, the driver can receive a \$83 ticket for each offense.

According to the Centers for Disease Control and Prevention (CDC), a driver is nearly 30 times more likely to be ejected from a vehicle when unbuckled. Occupants who

are ejected from the vehicle are more than 90 times more likely to be killed. In 2018, 105 motor vehicle occupants killed in crashes on Maryland roads were not wearing seat belts. Additionally, drivers and passengers who are improperly buckled run the risk of being partially ejected from a vehicle, which can lead to loss of limbs or other serious injuries.

For more information on the rollover simulator, or to request this educational resource for a community event, please visit ZeroDeathsMD.gov, or contact the MDOT

MVA's Highway Safety Office's Occupant Protection Program Manager at mwall1@mdot.maryland.gov. Learn more about the MDOT MVA's Highway Safety Office at ZeroDeathsMD.gov or on Facebook, Twitter and Instagram at [@ZeroDeathsMD](https://www.instagram.com/ZeroDeathsMD).

All emergency services personnel are reminded that whether riding in an emergency vehicle or personal vehicle, it is critical that drivers and all riders buckle up – every seat, every ride – to ensure that everyone in the vehicle arrives safely! ■

Texting to 9-1-1

PUBLIC-SAFETY ANSWERING POINT (PSAP) call centers across Maryland can now receive and respond to text messages sent to 9-1-1. If an individual needing assistance cannot make a voice call to 9-1-1 due to a disability, medical emergency, or unsafe situation, they can instead type out a message. The service is open to AT&T, T-Mobile, Verizon and former Sprint customers with text message or data plans. Both visitors to Maryland and residents can text 9-1-1 in an emergency. Virginia and Washington, D.C., already offer text-to-9-1-1 services.

Text-to-9-1-1 should be used in three scenarios: for those who are deaf, hard-of-hearing, or have a speech disability; when it is unsafe to place a voice call to 9-1-1; and for those experiencing medical emergencies that make them unable to speak.

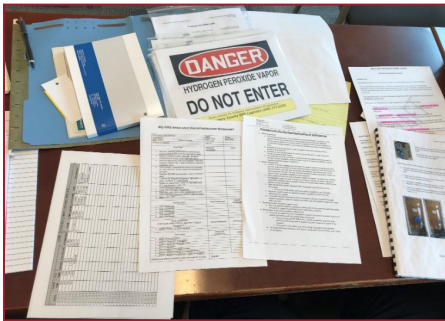
When the person enters 9-1-1 into the "to" line of the text message. They need to type a brief message and include their location and what type of help they need (fire, EMS, or police). Once they hit send, a specialist will re-

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MDERS Collaborates

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effective method to address the face protection PPE gap. By periodically disinfecting the N95 masks worn by public safety personnel, the masks could be re-worn, effectively extending the lives of the limited supply of masks. Each department assigned their emergency medical services logistics personnel to coordinate the implementation of the BioQuell process.



▲ Developing policy and procedures was an important component of the process. Coordinating the information for both departments occurred on a regular basis. The result of this work was a consistent process of planning the activities, executing the work, checking the result, and correcting any deficiencies. These steps validated the documentation as a true and trusted source for personnel.

These members engaged in daily communication with MDERS staff to identify department gaps in policy, process, and training. In collaboration, a set of draft policies and procedures were written. Equipment assessment identified the need for new solution and meter calibration. Personnel took corrective action to secure supplies. Within 14 days, the MCFRS and PGFD deployed the BioQuell method. Both teams disinfected over 20,000 pieces of PPE supplies while assuring the safety of county personnel.

Planning is a critical process for all emergency services departments. The COVID-19 pandemic highlights the need to think out all the possible threats that confront a community. Start with local observations and data gathered from significant fire, EMS, or rescue events; after-action reports; routine incidents; and lessons learned from other systems. Use the data-driven conclusions to map out how those incidents impact your community. Ask what resources are required for the community to address those needs and document them. Work that scenario into a tabletop or case study type drill, document those results, and plan out how to close the gaps.

The Maryland-National Capital Re-

gion Emergency Response System provides planning services to build capabilities. If you have questions, please contact michael.mcadams@maryland.gov. ■



▲ MCFRS personnel load N95 masks into the trailer used for the disinfection process. Working as a collaborative team, MCFRS and PGFD exchanged information about equipment. This resulted in the practice of hanging masks from the wire racks. Crews constantly adjusted to maximize the efficacy and efficiency of the process. As an example, crews observed that laying N95 masks flat on the disinfection cart required excessive time. The crews found that hanging the masks with clothespins increased the number of masks in a run and reduced the load time by 50%.



DUE TO THE CURRENT COVID-19 pandemic, the Maryland Fire-Rescue Services Memorial 2020 Gala regretfully has been cancelled. The Maryland Fire-Rescue Services Memorial Foundation thanks everyone for their continuing support and looks forward to next year's event. The 2021 Annual Memorial Service is scheduled for Sunday, June 6, 2021, in Annapolis. ■

EHI Protocol

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the Maryland EMS system, MATA highlighted that rapid transport of EHI cases is not in the patient's best interests and oftentimes will delay appropriate care by delaying active cooling.

Local emergency departments around the state frequently lack adequate active cooling capabilities, especially for cold-water immersion. Certified Athletic Trainers often have cold-water immersion tanks and rectal thermistors available onsite, and often have initiated active cooling while awaiting EMS arrival. Maryland is one of only a handful of states to now recognize and promote cold water immersion in its EMS protocol. ■

9-1-1

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spond. The person ready to answer questions or follow instructions. If the service is temporarily unavailable, the person should get a text informing them they need to call 9-1-1 by phone.

The individual should not send photographs, videos, or add another contact to the conversation with 9-1-1 as it could prevent the message from being received. It is still best to call if the person needing help is able, partly because text messages can be delivered slowly, or sometimes fail to arrive at all. *Remember, call if you can, text if you can't.* ■







Maryland Risk Watch online resources for October Fire Prevention Week.

The Maryland Risk Watch team has a few online educational resources for children, youth and families that can be linked to as part of a virtual October Fire Prevention Week, October 4-10, 2020. They are also appropriate year round.

These short videos are posted in a movie format on the MIEMSS YouTube account:
<https://www.youtube.com/user/MarylandEMS>

Below is a list of recent presentations:

-  [10 Steps to Take in an Emergency](#)
-  [What to Expect when you Call 9-1-1: Ambulance](#)
-  [What to Expect when you Call 9-1-1: Fire](#)
-  [What to Expect when you Call 9-1-1: Police](#)



Upcoming Pediatric Education Opportunities

Maryland EMSC is working on PEPP 4th edition course schedules to partner with regional and state conferences in 2021. An instructor update will be held this fall with members of the National PEPP steering committee. For more information, email pepp@miemss.org

EMSC has developed and posted online continuing education programs that are posted in the MIEMSS Online Training Center at <http://www.emsonlinetraining.org/>

Below is a list of recent presentations:

- [Pediatric Stroke](#)
- [Pediatric Burns](#)
- [Tracheostomy Management](#)
- [Neonatal Resuscitation](#)
- [Pediatric HPCPR](#)

The Pediatric High Performance CPR is also posted in a movie format (non-CE-eligible) on the MIEMSS You Tube account:
<https://www.youtube.com/user/MarylandEMS>

REMINDER: MIEMSS is accepting nominations for both the 2021 Stars of Life and the 2021 Right Care When It Counts awards categories. These awards are for actions taken between January 1, 2020, and December 31, 2020. Nominations for the Stars of Life and Right Care When It Counts awards may be made by peers or a member of the public. The forms are now all online in a Smartsheet form that is easy to complete and allows for attachments. Visit <https://www.miemss.org/home/documents> for a link to the nomination forms, as well as a separate link to the awards criteria. ■



Provisional EMT

(Continued from page 1)

individuals with expired Maryland EMS licenses/certifications.

While the nearly 1,200 Provisional EMS clinicians licensed since March have certainly enhanced Maryland's response readiness, for Alexa Welch, the firsthand experience has proved invaluable. A sophomore at Towson University, where she majors in exercise science, Welch enrolled in an EMT course at the Community College of Baltimore County – Essex in January and, upon qualifying for her Provisional EMT License, joined Butler Medical Transport in Towson in May. Since then, she has participated in roughly a dozen ridealongs, primarily interfacility transports. Welch has also taken part in a few ridealongs with Essex Volunteer Fire Department, of which she is a member.

For Welch, the experience has definitely augmented her didactic studies, especially with the practical application of her EMS skills. "You're given so much in-

formation in the classroom, but it doesn't really click together until you actually practice it," she said. Moreover, Welch's work in the field has made the COVID-19 pandemic "more real to me. If it's not directly happening to you, it doesn't seem real," she explained. In turn, "it gives me an opportunity to share my firsthand experience" to educate family and friends.

Welch's own life experience and role models, notably her grandmother, have informed her approach to EMS. "My grandmother always treats people, no matter who they are, the same, which is how you treat people in EMS," she said. "Going into people's homes, seeing different people's lives, you have to learn how to speak with others in ways that you don't necessarily do when you're in your own bubble."

"I really love helping people," said Welch. "I like to put a smile on people's faces and make them laugh."

On her journey to becoming a fully certified EMT Welch has also found inspiration in the "shared passion" of the

diverse personalities of her fellow EMS clinicians at Butler.

"I don't think I'll ever leave the medical profession," she said.

"On behalf of all Marylanders, we are grateful for the commitment and dedication of the skilled and compassionate EMS students who have felt compelled to make their contributions to Maryland's EMS system during this time," said Dr. Ted Delbridge, MIEMSS Executive Director. "We hope that all provisional EMS clinicians will desire to remain a part of Maryland's EMS system."

Provisional Status personnel may provide EMS until the end of the state health emergency period declared by Governor Larry Hogan, plus 180 days. Paramedics may continue to provide EMS under their provisional NREMT certification until December 31, 2021. ALL Provisional Statuses other than paramedics terminate at end of the emergency period, plus 180 days. For more information, or to apply online for a Maryland EMS Provisional License/Certification, visit www.miemssllicense.com. ■

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Governor Larry Hogan
Lt. Governor Boyd Rutherford

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