

Maryland EMS News

For All Emergency Medical Clinicians

Vol. 49 No. 6

September 2023

MSPAC Blood on Board Program Takes Flight



Dr. Douglas J. Floccare, State Aeromedical Director and Medical Director for Maryland State Police Aviation Command, speaks at the August 21 press conference announcing the "Blood on Board" initiative.

REPRESENTATIVES FROM MIEMSS, Maryland State Police (MSP), and the R Adams Cowley Shock Trauma Center (RACSTC) at the University of Maryland Medical Center (UMMC) announced a new public-private collaboration for lifesaving trauma response for Marylanders during a news conference held August 21, 2023, at MSP Aviation Headquarters at Martin State Airport in Middle River, Maryland.

MIEMSS Executive Director Dr. Ted Delbridge joined other dignitaries, including State Aeromedical Director/Medical Director for MSP Aviation Command Douglas J. Floccare, MD, MPH, FA-CEP; RACSTC Physician-in-Chief Thomas M. Scalea; MD, MSP Superintendent Col. Roland L. Butler, Jr.; and UMMC Senior Vice President and Chief Operating Officer Ron Cummins, Jr., to announce that

MSP's fleet of "Trooper" helicopters used in prehospital air medical response (medevac) recently began carrying whole blood for emergency transfusions for critically injured patients during transport. Maryland is the first state in the country to offer this lifesaving "Blood on Board" initiative statewide.

Maryland's most seriously in-

*See **BLOOD ON BOARD** page 20*

EMS News Digest

■ Study: 60% of Ground Transports Were Out-of-Network in 2022 (EMSI).

A new study released in September 2023 by FAIR Health analyzing ground ambulance services nationwide found that 59.4% of all ground transports were out-of-network in 2022. The New York-based non-profit also found that ALS services were required more often than BLS services from 2018-2022. Read more: <https://www.emsl.com/ems-management/articles/study-60-of-ground-transports-were-out-of-network-in-2022-dLWg-fmVKkaAoGhEp/>

■ Harford County Public Safety and Preparedness Day (The Baltimore Sun).

View photo highlights from Public Safety and Preparedness Day, held on September 16, 2023, at the Harford County Department of Emergency Services facility in Forest Hill. Read more: <https://www.baltimoresun.com/photos/cng-ag-harford-county-emergency-preparedness-day-vg-20230916-3efxixb4zrf-3niwzrvbodrbv54-photogallery.html>

[baltimoresun.com/photos/cng-ag-harford-county-emergency-preparedness-day-vg-20230916-3efxixb4zrf-3niwzrvbodrbv54-photogallery.html](https://www.baltimoresun.com/photos/cng-ag-harford-county-emergency-preparedness-day-vg-20230916-3efxixb4zrf-3niwzrvbodrbv54-photogallery.html)

■ More States Push to Recognize EMS as “Essential Service” (EMSI).

A growing number of states are taking interest in recognizing ambulance services as essential — a long-awaited move for EMS agencies and professionals in the field, who say they hope to see more states follow through. Experts say the momentum might be driven by the pandemic, a decline in volunteerism and the rural health care shortage. Read more: <https://www.emsl.com/politics/articles/more-states-push-to-recognize-ems-as-essential-service-CIUIBa0k2kdZoHV7/>

■ Governor Moore Announces More Than \$11.5M in Highway Safety Grants to Organizations Across Maryland (Office of the Governor).

On September 12, 2023, Governor Wes Moore announced more than \$11.5 million in federal highway safety grants to organizations across Maryland as part of a statewide focus to prevent motor vehicle crashes and eliminate roadway fatalities. The Maryland Department of Transportation MVA Maryland Highway Safety Office will distribute the federal funds to 85 agencies, organizations, and programs on October 1. Read more: <https://governor.maryland.gov/news/press/pages/governor-moore-announces-more-than-115-million-in-highway-safety-grants-to-organizations-across-maryland.aspx>

■ New EMS HeatTracker Helps Understand and Reduce Health Risks (US Fire Administration).

The US Department of Health and Human

See *EMS NEWS DIGEST* page 24

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The 2023 Maryland EMS Protocols

THE 2023 MARYLAND MEDICAL PROTOCOLS FOR EMERGENCY MEDICAL SERVICES took effect on July 1, 2023. Several significant additions and modifications were incorporated into the protocols this year. The following is a brief summary of those changes:

■ **Atrial Fibrillation Treatment:**

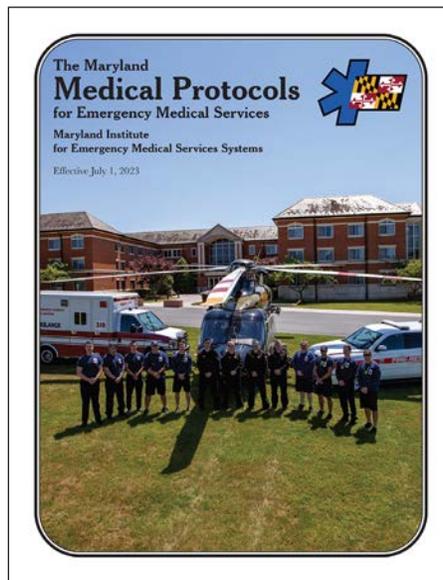
The guidelines for treatment of symptomatic atrial fibrillation and atrial flutter were clarified by requiring a heart rate of 130 bpm or greater to administer diltiazem.

■ **Buprenorphine Optional Supplemental Protocol for MIH Teams:**

This addition allows Mobile Integrated Health clinicians to administer buprenorphine to patients who have been recently resuscitated with naloxone. This protocol is intended to provide a bridge to long-term care for patients suffering from opioid use disorder.

■ **Diltiazem Infusion for Interfacility Transport:** A qualified CRT or paramedic working for commercial services is now allowed to monitor an adult patient on a continuous intravenous diltiazem infusion. The infusion must have been initiated by the sending facility and the rate may not exceed 15 mg/hour.

■ **General Patient Care Communications:** This revision defines the difference between a hospital notification and a medical consultation. It also changes the requirement for on-line medical consultation for Priority 1, unstable Priority 2, and Specialty Alert patients to a hospital notification, at minimum, for all Priority 1, Priority 2, and Specialty Alert patients. Medical consultation is still required in some specific treatment



protocols or if the EMS clinician has questions regarding treatment or destination.

■ **Hospice/Palliative Care:** Patients enrolled in hospice who are receiving locked continuous intravenous infusions may now be transported by BLS commercial services. In addition, hospice patients with chest tubes and those on ventilators with stable settings may be transported by ALS commercial services.

■ **Nitroglycerin (IV) Pilot:** This pilot protocol allows intravenous nitroglycerin to be administered by IV bolus or infusion pump to patients with severe CHF requiring CPAP or BiPAP.

■ **Pain Management for Pacing and Cardioversion:** Low-dose ketamine may now be given for pain management to patients who are receiving transcutaneous pacing or cardioversion.

■ **Pediatric Cardiac Arrest:** The High-Performance CPR Algorithm was moved from the Procedures section to the Cardiac Arrest – Pediatric

section. An age-based epinephrine dosing chart was added to the ALS algorithm with the goal of reducing first-dose delivery time.

■ **Refractory VF/VT:** A revision to the Ventricular Fibrillation and Pulseless Ventricular Tachycardia Algorithm clarifies that a patient in refractory VF/VT can be defibrillated for as long as they remain in a shockable rhythm without a limit on the number of shocks allowed. Use of magnesium sulfate was moved from a footnote into the VF/VT algorithm.

■ **Respiratory Rate Changes:**

This revision changes the recommended ventilatory rate during CPR and rescue breathing for patients under 13-years-of-age to one breath every three seconds (from one breath every five seconds). For patients 13-years-of-age and older, the ventilatory rate was changed to one breath every six seconds (from one breath every five seconds).

■ **Tranexamic Acid (TXA) for Postpartum Hemorrhage:** Postpartum hemorrhage with systolic blood pressure less than 90 mmHg or heart rate greater than 110 bpm and ongoing blood loss despite uterine massage is now an indication for the use of TXA.

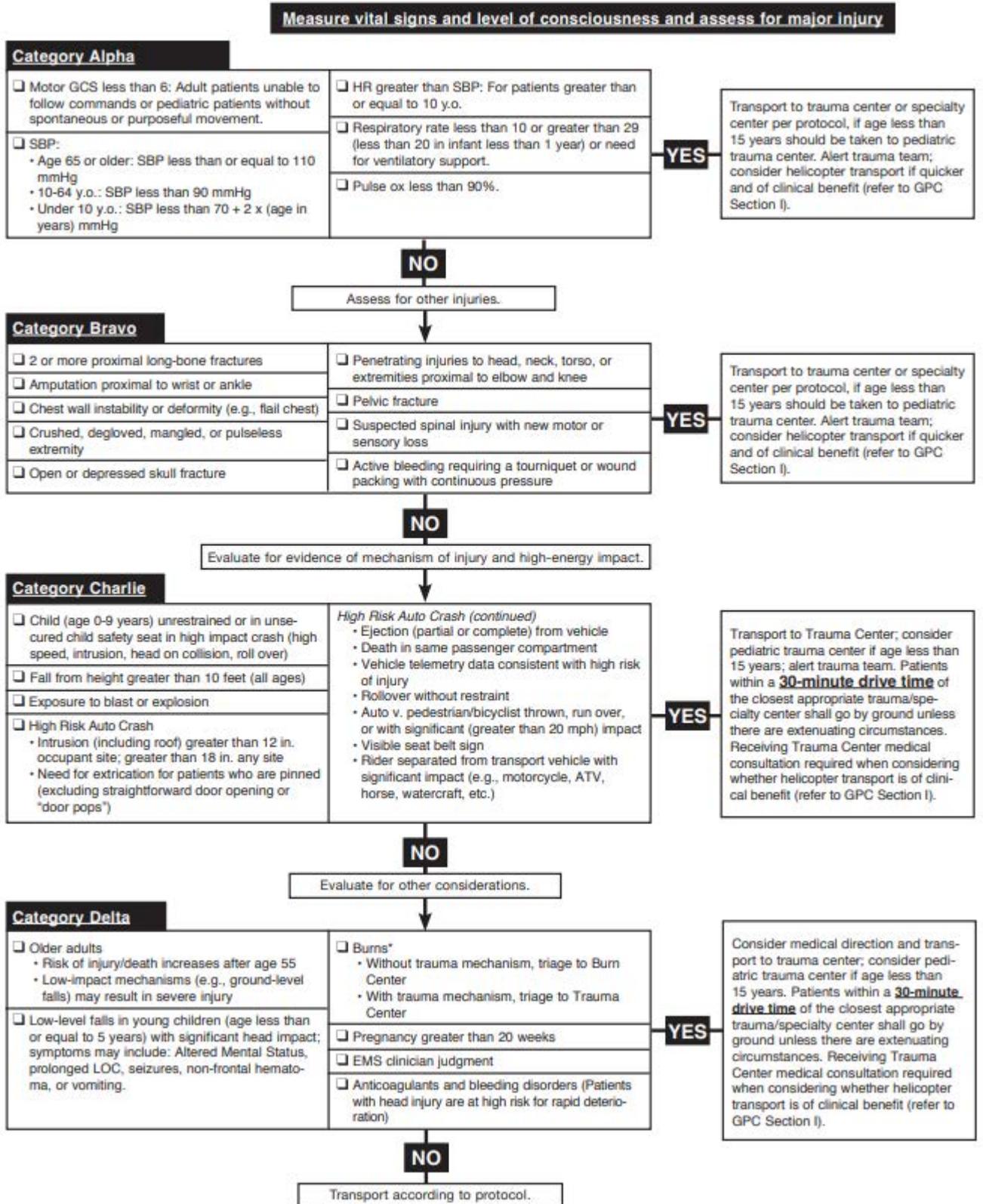
■ **Trauma Decision Tree Changes:** These revisions incorporate some of the changes to clinical criteria in the updated NHTSA National Guidelines for the Field Triage Injured Patients into the Maryland Trauma Decision Tree.

■ **Ultrasound (Pilot):** Point-of-care ultrasound may now be used

See *EMS PROTOCOLS* page 24

Maryland EMS Trauma Decision Tree (2023)

Trauma: Trauma Decision Tree 8.9





Protocol Spotlight: Trauma Decision Tree 2023

IN PREPARATION FOR THE ROLLOUT of the new *Maryland Medical Protocols for Emergency Medical Services* on July 1, I'd like to focus on some of the changes headed your way. The Trauma Decision Tree (TDT) is one section that contains several revisions this year.

Whether you work or volunteer in an urban, suburban, or rural area of Maryland, you're going to encounter injured patients on a regular basis. The TDT (*see page 4*) guides EMS destination based upon anatomic, physiologic, and mechanism-based criteria. The goal is always to get the right patient to the right place at the right time. This algorithm should be applied to patients with significant traumatic injury or mechanism. Notably, patients with isolated or minor injuries may not fit into a category or meet criteria for transport to trauma centers.

Barring exigent circumstances, Category Alpha, Bravo, and Charlie patients should be transported directly to a trauma center. We request that EMS clinicians *consider* transport to trauma centers for Category Delta patients. For this year, we've revised and added criteria within the trauma categories based upon the latest American College of Surgeons and NHTSA Office of EMS recommendations. Here's a quick look at some of the additions and changes:

■ Category Alpha

- *Motor GCS score replaces total GCS as a criterion.* Patients with motor GCS scores less than 6 should be transported to a trauma center.

- *Shock index (Heart Rate / Systolic BP).* For patients 10-years-of-age and older, heart rates that exceed systolic blood pressure (Heart Rate greater than Systolic BP) meet category alpha criteria.
- *Age-specific blood pressures.* Systolic BP less than 110 mmHg for age 65 and

The Trauma Decision Tree guides EMS destination based upon anatomic, physiologic, and mechanism-based criteria. The goal is always to get the right patient to the right place at the right time.

older, Systolic BP less than 90 mmHg for ages 10-64 years, and Systolic BP less than 70 plus 2 times the patient's age (in years) for patients less than age 10 are all category alpha criteria.

- *Pulse oximetry less than 90%.* For patients without baseline need for supplemental oxygen, a pulse ox reading of less than 90% is a new category alpha criterion.

■ Category Bravo

- *Active bleeding requiring a tourniquet or wound packing with continuous pressure are*

new Category Bravo criteria.

- *The suspected spinal injury criterion in Category Bravo has been revised to include patients with either new motor or sensory deficits.*

■ Category Charlie

- *A fall from a height of 10 feet or greater is now a Category Charlie criterion for patients of all ages. Previously, the criterion was a fall from a height greater than 20 feet for adults or three times the patient's height for children.*
- *Need for extrication for patients significantly entrapped within a vehicle and visible seat belt sign have been added as Category Charlie criteria.*
- *Children (birth to 9-years-of-age) who are unrestrained or in an unsecured child safety seat in high-impact crashes are now Category Charlie patients.*

■ Category Delta

- *Children 5-years-of-age and younger presenting after a low-level fall with significant head impact (prolonged loss of consciousness, non-frontal hematoma, vomiting, altered mental status, or seizure) are Category Delta patients.*

The new protocols and video updates for ALS and BLS clinicians are available online.

■ *Protocol:* <http://www.miemss.org/home/ems-providers/protocols>

■ *ALS/BLS (Video) Update:* www.emsonlinetraining.org. ■

MIEMSS ON THE MOVE

Wilson Joins EMSC Grant Staff



MARY ELLEN WILSON,
RN, BSN, CPEN
EMSC Hospital Specialist

MARY ELLEN WILSON, RN, BSN, CPEN, has joined the EMS for Children (EMSC) State Partnership grant staff as the EMSC Hospital Specialist, effective May 1, 2023. In her new role, Mary Ellen focuses on pediatric readiness in emergency departments across Maryland, recruiting Pediatric Nurse Champions in each ED, and advancing educational resources for all EDs in Maryland.

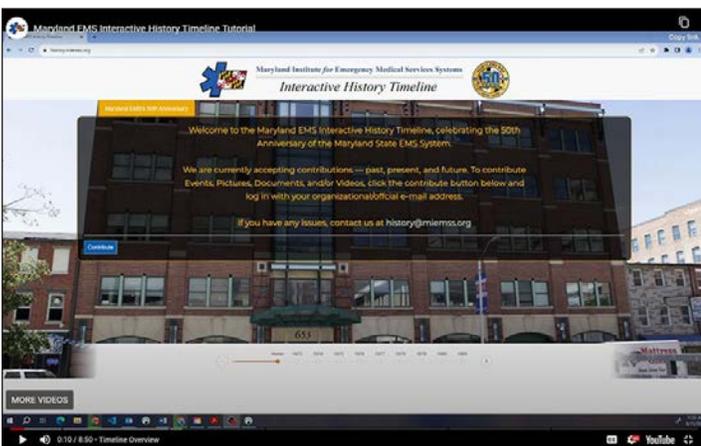
Mary Ellen recently

retired from the Pediatric Emergency Department at Johns Hopkins Children's Center, where she worked for more than 40 years most recently as a Clinical Nurse, with a specialty in nursing informatics. She has represented EMSC on the Maryland Family Advisory Network Council for the past two decades. Throughout her career, Mary Ellen has developed training programs for families as well as EMS clinicians, including the

“Emergency Ready Families” training utilized by Pediatric EMS Champions across the state.

Both a mother and grandmother, Mary Ellen and her family frequently participate in the annual Safe Kids Maryland “Steps to Safety” program in Ocean City providing education to children, families, and community risk reduction specialists with injury prevention tools at eight different interactive skill stations. ■

MIEMSS Marks Maryland EMS System's 50th Anniversary with Interactive History Timeline



To access the Maryland EMS Interactive History Timeline, visit history.miemss.org, or scan the QR code below:



IN RECOGNITION of the statewide Maryland EMS system's 50th anniversary, MIEMSS has developed an Interactive History Timeline to collect, archive, and display events, documents, images, and videos produced

over time, and provide a repository for hospitals, organizations, clinicians, and others to contribute their own pieces of the Maryland EMS system's past, present, and future. Anyone connected to the EMS system is welcome

and encouraged to freely contribute information to the timeline in perpetuity. To learn more about the Interactive History Timeline, including how to access and upload content, visit <https://history.miemss.org/>. ■

MIEMSS ON THE MOVE

MIEMSS Inducts 11 Into Region I EMS Hall of Fame



MIEMSS HONORED 11 INDIVIDUALS whose hard work and dedication have significantly improved emergency medical care systems in Allegany and Garrett Counties during a ceremony held July 20, 2023, at Garrett College Performing Arts Center in McHenry, Maryland. Honorees included Barry Beal; Steven Kesner; Dwayne Kitis; Diane May; Al Ward; Cheryl Rexrode; Linda and Rob Rase; John Henry Frank, III; Anna Lea McCormick (posthumously); and Francis Mowbray (posthumously). MIEMSS Director of Mission Support Dwayne Kitis and Alex Kelly, MIEMSS, Acting Region I and II Coordinator, officiated the honorees' induction into the Region I EMS Hall of Fame before an audience of colleagues, family, and friends. Each inductee received a plaque of recognition and a MIEMSS commemorative challenge coin, as well as a Certificate of Appreciation from the Allegany and Garrett County Volunteer Fire and Rescue Association. [Pictured, from left: Eric Mowbray; Sean Mowbray; Steven Kesner; Jason Mowbray; Allan Ward; Barry Beal; Robert Rase; Linda Rase; Diane May; Cheryl Rexrode; Dwayne Kitis; Alex Kelly; Jennifer McCormick; MaryJane McCormick; and Randy McCormick.] ■



EMS LUMINARIES past and present athered at the Double-Tree by Hilton in Annapolis on July 28, 2023, for a special event celebrating the 50th anniversary of the Maryland EMS system. To view photo highlights, visit www.MIEMSS.org, or scan the QR code below:



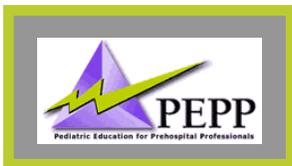
The 2023 Maryland EMS Awards

EACH YEAR, MIEMSS celebrates EMS Week by honoring men and women across Maryland who have contributed to the EMS system. The 2023 Maryland EMS Awards recognize specific individuals, agencies, and incidents occurring between January 1, 2022, and December 31, 2022. The EMS Awards are comprised of two main categories – the Maryland Stars of Life Awards, for adults, and the Right

Care When It Counts Awards, which recognizes children and youth in Maryland who have demonstrated steps to take in or ways to be better prepared for an emergency.

This year's honorees were nominated by peers or members of the public, and selected by a statewide committee consisting of career, volunteer, and commercial EMS clinicians. Executive Direc-

tor Dr. Ted Debridge led a delegation from MIEMSS that traveled to locales across the state to present this year's awards. State EMS Board Chair Clay B. Stamp, Associate State EMS Medical Director Dr. Jennifer Anders, and Cyndy Wright-Johnson, Director of the EMS for Children program at MIEMSS, participated in several presentations. ■



In a pediatric emergency, are you able to answer the following questions in seconds?

- 🔊 **How sick is this child?**
- 🔊 **How quickly do I need to act?**
- 🔊 **What is your primary concern for the child?**
- 🔊 **How/Where do I transport the child?**



PEPP – 4th Edition:

Pediatric Education for Prehospital Professionals Hybrid Course

Sponsored by the Maryland EMS for Children State Partnership Grant & EMSC Program

The PEPP-4 hybrid course features an all-new lecture on Behavioral Emergencies, role-play activities and learning games, such as trivia, along with updated case-based lectures, videos, hands-on skill stations, and small group discussions. The PEPP-4 Hybrid Course is designed by the American Academy of Pediatrics specifically for both ALS & BLS clinicians with a focus on assessment and management of ill or injured children. Maryland EMS for Children has added additional scenarios and special equipment to correlate with EMS Scope of Practice in Maryland.

BLS Participants must complete 10.25 hours of online learning prior to attending the one-day onsite portion.

ALS Participants must complete 11.75 hours of online learning prior to attending the one-day onsite portion.

Participants will receive an AAP course completion card by participating in both the online and on-site portions of the course and successfully completing a written test.

Required – online learning must be completed prior to attending the course.

Textbook will be mailed with online access code to address provided upon receipt of registration.

CE's: BLS Clinicians will receive 15 hours, ALS Clinicians will receive 18.75 hours upon completion of both online and on-site components

When:	Thursday, October 19, 2023 from 8:00 AM to 5:00 PM
Where:	MIEMSS Headquarters 653 West Pratt St., Baltimore, MD 21201
Who:	BLS and ALS EMS Clinicians
Cost:	\$50.00

Register online @

<https://eecreg3.wufoo.com/forms/october-2023-pepp4-hybrid-course/>

Registration Deadline is Monday, October 2nd

Space is limited so register early

Maryland EMS for Children State Partnership Grant is providing the course textbook, course materials, faculty, and networking lunch for the course.

THE MARYLAND STAR OF LIFE AWARD

This award recognizes an individual, multiple individuals, or teams on the same incident for an outstanding rescue under extreme circumstances by EMS personnel.



Members of Frederick County EMS and Maryland State Police Aviation Command, Trooper 1 responded to multi-vehicle crash on October 21 that included a fuel leak, patient extrication, and medevac transport.

THIS YEAR, we honor multiple teams that responded to a highway incident that exemplified outstanding rescue under extreme circumstances by Frederick County EMS, including **Urbana Volunteer Fire & Rescue, United Steam Fire Engine Company #3, the Frederick County Division of Fire and Rescue Services, and Maryland State Police Aviation Command, Trooper 1.**

On October 21, 2022, the Frederick County 9-1-1 center received multiple calls for a motor vehicle collision in the northbound lanes of I-270 near Baker Valley Road. The incident involved multiple vehicles, including an overturned dump truck which was reported to have fuel

leaking from the fuel tanks. As EMS arrived, they quickly established command and set specific tasks in order to stabilize the vehicles, control the fuel leak, and extricate victims of the accident.

EMS personnel assessed the driver of the dump truck, who had a compound fracture of his lower right leg, and his mangled foot was nearly amputated. The position of the driver's seat, which had been sheared from its bolts, had left the other leg inaccessible. EMS administered oxygen and monitored the patient while crews rendered the scene safe for extrication.

While fire and rescue units worked to secure and stabilize the

truck, hazmat teams stopped the fuel leak and spread granular absorbent to provide safer footing for rescue personnel. EMS extricated the patient and moved him to a backboard. The driver's left leg, previously inaccessible, had in fact been amputated below the knee. EMS controlled the excessive bleeding by applying a tourniquet. The stabilization and extrication took 46 minutes. The extricated driver was transferred by ambulance to Frederick Municipal Airport, from which Maryland State Police Trooper 1 transported him to the R Adams Cowley Shock Trauma Center in Baltimore for definitive

See STAR OF LIFE page 20



THE MARYLAND EMS CLINICIAN OF THE YEAR AWARD

This award recognizes an EMS clinician who has made outstanding contributions in the past year to the continuous improvement of emergency medical services in the state; examples include, but are not limited to, the areas of quality assurance, public or EMS education, prevention, delivery of EMS services, and new technologies.



From left: State EMS Board Chair Clay B. Stamp; Captain Jennifer Andrews; MIEMSS Executive Director Dr. Ted Delbridge.

OUR 2023 MARYLAND EMS CLINICIAN OF THE YEAR is **Captain Jennifer Andrews**, for her role as a Training Committee member specializing in pediatric and hospice care, medical logistics coordinator, and ride-along liaison for the county. Jennifer works as a clinical instruc-

tor at Chesapeake College and is a multidisciplinary American Heart Association instructor, including CPR, Pediatric Advanced Life Support, and Advanced Cardiovascular Life Support. Jennifer is heavily involved with MIEMSS as a pediatric EMS champion and a chairperson

of the Pediatric Emergency Medical Advisory Committee, PEMAC. Jennifer's caring nature enables Jen to build bonds with everyone from her patients and their families to coworkers, volunteers, and hospital staff and is a definitive role model to all EMS and healthcare personnel. ■

Submit your nominations for the 2024 Maryland EMS Awards! Scan QR code on p. 17 for details.



THE LEON W. HAYES LIFETIME EXCELLENCE IN EMS AWARD

This award honors an individual who has devoted a lifetime to excellence in patient care, compassion and respect for each patient, and commitment to continuous improvement of the Maryland EMS system through his/her professional and personal lives.



From left: State EMS Board Chair Clay B. Stamp; Michael J. "Mike" Young; MIEMSS Executive Director Dr. Ted Delbridge.

THIS YEAR, we honor **Michael J. "Mike" Young**, who joined the Oxford Volunteer Fire Company in 1963. Mike has been an active member and perennial top responder ever since. His EMS career began when the fire company bought its first ambulance in 1966. With initial certification in Advanced First Aid, he progressed through EMT-A in 1972, Cardiac Rescue Technician (CRT) in 1986, and in 1990 he graduated to Paramedic. Upon completion of his CRT training in 1986, Mike began volunteering with the fledgling

Talbot County ALS (TCALS). Mike logged 645.5 on-call hours and ran 117 calls. As a career clinician, Mike was hired full-time by the Department of Defense Medical Corps in 1986 and worked primarily as a Paramedic/Instructor and was certified as a Wilderness Medical Technician and Surgical and Respiratory Technician. Mike holds a degree in Education from Salisbury University and teaches EMS Preparedness. He has travelled state-wide teaching, testing, monitoring, and mentoring both students and instructors. Mike

was the first "Mid-shore" Advanced First Aid and CPR instructor, assisted with the *The Maryland Way Handbook* (a precursor of today's EMS Protocols), provided instruction for Maryland Fire and Rescue (MFRI), and remains and instructor for the American Heart Association. Mike has 57 years of continuous service and is still an active EMS Clinician in Maryland. ■



THE MARYLAND EMS-CHILDREN AWARD

This award is given to an adult or program that has demonstrated ongoing dedication and commitment to improving the care of children and for promoting family centered care in a Maryland EMS program or hospital.



From left: State EMS Board Chair Clay B. Stamp; Dr. Stephanie Sisler; Associate State EMS Medical Director for Pediatrics Dr. Jennifer Anders; MIEMSS Executive Director Dr. Ted Delbridge.

AS GARRETT COUNTY'S sole pediatrician, **Stephanie Sisler, MD**, is committed to caring for children of all ages, from newborns to teenagers. For six years, she has served as the Region I Pediatric EMS Medical Director. Dr. Sisler has also served as the Child Abuse Medical Provider for the state of Maryland, and she performs evaluations for the Garrett County Department of Social Services.

As the Pediatric EMS Medical Director, Dr. Sisler works with the EMS Medical Directors from Garrett and Allegany Counties to review aspects of pediatric cases such as EMS transport, asthma attacks, and

complications that may arise during care. When EMS responses do not go as expected, she reviews the treatment to ensure all clinicians are using the right standards of care and the correct pediatric care information.

As the Garrett County Abuse Examiner, Dr. Sisler reviews cases of neglect, evaluates their severity, testifies in legal cases, and works with the Department of Social Services to increase public education and support foster care. Working closely with Maryland State Foster Care, she provides guidance for foster families and professional teams advocating for children's safety and

continuity of care. This year, she facilitated a trauma informed course focused improving the lives of children and families through parental empowerment; 26 parents completed the course.

Through her private practice, Dr. Sisler works with other professional family practices to expand resources for children in Western Maryland and is on staff at Garrett Regional Medical Center. By meeting parents "where they are," Dr. Sisler works to ensure that Garrett County parents are equipped with the tools and confidence that they need to care for their families without having to travel too far. ■

THE OUSTANDING EMS PROGRAM AWARD

This award recognizes a program that offers an innovative approach to reducing death and disability. The program must be affiliated with an EMS system component, such as a hospital, educational facility, rescue squad, or EMS organization.



From left: MIEMSS Executive Director Dr. Ted Delbridge; Jeffrey Clements, Chief, 9-1-1/Public Safety Communications; Kaitlyn Wood, Public Safety Dispatcher II; Antonella Volpe, Public Safety Communications Supervisor; Christopher Roberts, Assistant Chief; Tony Rose, Deputy Director, Charles County Department of Emergency Services; April Thompson, Public Safety Communications Supervisor.

THROUGH ITS RESUSCITATION QUALITY IMPROVEMENT PROGRAM, the **Charles County 9-1-1 Fire/EMS Communications Center** – in conjunction with RQI Partners, LLC, the American Heart Association, and Laerdal Programs – is working to help its 9-1-1 specialists’ more quickly recognize incidents of cardiac arrest and, in turn, initiate cardiopulmonary resuscitation (CPR) as early in the prehospital stage of patient care as possible.

First implemented in August 2019, the program is designed to boost telecommunicators’ performance in providing T-CPR instructions, establishing the correct rate

for compressions, and limiting interruptions to CPR, resulting in the delivery of high-quality prehospital patient care. Incorporating cognitive learning and scenario-based training, quarterly completion and compliance reports, and continuous feedback, the program enjoys 100% compliance, resulting in the procurement or renewal of 28 RQI-Telecommunicator credentials. In the first quarter of 2023, recognition of cardiac arrest occurred in 100% of the calls submitted for case review, meeting the KPI goal for start-of-call to recognition of cardiac arrest. The first three months of this year also saw the best problem-solving scores

and fastest first-compression times recorded since the program’s launch. Since its inception, the survival rate of out-of-hospital cardiac arrests has increased 220%.

Through this quality improvement initiative, 9-1-1 specialists have helped to improve patient outcomes by reducing death and disability while demonstrating significant improvement of delivery of viable patients to area hospitals. Please join us in recognizing the Charles County Department of Emergency Services Resuscitation Quality Improvement Program as the “Outstanding EMS Program” of the year. ■



THE MARYLAND EMS CITIZEN AWARD

This award recognizes citizen-rescuers who have demonstrated quick thinking, fast action, and heroism in a trauma or medical emergency. This year's award is presented to three individuals for their actions in two separate incidents.

LAST SUMMER, 18-year-old camp counselor **Tuvia Moses** was leading a group of campers on a hike along the Northwest Branch Anacostia River. Suddenly, one of the campers slipped and fell into the river near the base of a waterfall, where he became trapped by a large log. The force of the nearby waterfall made it difficult for the camper to keep his head above water. Noting the gravity of the situation, Mr. Moses quickly entered to water. Although he was not able to free the camper, Mr. Moses helped to keep his

head above water until EMS arrived on scene.

Responding personnel from Montgomery County Fire and Rescue Service (MCFRS) provided Mr. Tuvia a personal flotation device with which he was able to float downstream to safety. MCFRS personnel temporarily redirected the water flow, enabling them to free the trapped camper. Thanks in large part to Mr. Moses' quick thinking and actions, the camper survived his ordeal with only a few minor bumps and bruises. ■



From left: Tuvia Moses; MIEMSS Executive Director Dr. Ted Delbridge.



THIS YEAR, we also recognize **Gene Dyson** and **Linnie Vann** for their quick thinking and actions when a coworker at Wor-Wic Community College suffered a cardiac arrest. Finding their coworker pulseless, Mr. Dyson called for help on the radio and quickly started chest compressions.

Mr. Vann responded to the radio call and soon arrived on scene with an AED. Effective CPR resulted in return of spontaneous circulation. Thanks in part to their actions, the patient was later discharged from TidalHealth Peninsula Regional with no neurological deficits. ■

From left: Gene Dyson; Linnie Vann.

THE RIGHT CARE WHEN IT COUNTS AWARDS

The Right Care When It Counts Awards recognize children and youth in Maryland who have demonstrated the proper steps to take in an emergency, or who have developed ways in which to be better prepared for emergencies when they occur.

WHEN A CLASSMATE EXPERIENCED

a seizure in the girls' locker room following a swim lesson on October 27, 2022, at Henry E. Lackey High School in Indian Head, Maryland, **Cadence Finney** and **Brooklyn Parnell** (both 15-years-old) leapt into action. Cadence immediately grabbed a towel, which she used to cradle the patient's head. Meanwhile, Brooklyn maneuvered the patient into recovery position before seeking help from coach Anastasia Reynolds, who nominated both Cadence and Brooklyn award. Although they are set to become CPS/AED-certified via their health class this spring, neither of the girls was certified at the time of the incident. ■



From left: MIEMSS Executive Director Dr. Ted Delbridge; Brooklyn Parnell; Anastasia Reynolds (accepting for Cadence Finney); EMSC Program Director Cyndy Wright-Johnson.

TEN-YEAR-OLD Madison Wiseman was playing in a field with her 12-year-old sister, Taylor, and their newly adopted dog. When Madison's sister approached the dog to present a treat, it suddenly attacked her. Madison immediately went to her sister to help remove the dog while screaming for help. Responding to her cries, Madison's grandfather was able to remove and secure the dog while she used her cell phone to call 9-1-1. She calmly provided the dispatcher with pertinent information. When responders arrived, Madison led them to the field and provided further information. Taylor was transported to a pediatric trauma center in 37 minutes from the time of incident. ■



From left: MIEMSS Executive Director Dr. Ted Delbridge; EMSC Program Director Cyndy Wright-Johnson; Madison Wiseman; Associate State EMS Medical Director for Pediatrics Dr. Jennifer Anders; State EMS Board Chair Clay B. Stamp.



THE RIGHT CARE WHEN IT COUNTS AWARDS

The Right Care When It Counts Awards recognize children and youth in Maryland who have demonstrated the proper steps to take in an emergency, or who have developed ways in which to be better prepared for emergencies when they occur.

WHILE WALKING TO A FRIEND'S HOUSE, Sophia Ritchie and Kai'Ree Emerson (both 12-years-old) encountered a woman calling for help. The girls ran over to find a woman cradling the head of an unconscious man. The woman instructed the girls to stay with him while she went home to get a damp cloth. Recognizing that the man was unconscious, and that his lips were turning blue, the girls immediately called 9-1-1. Sophia gave the 9-1-1 dispatcher the location and important information about the man. The two girls waited with the man until the ambulance and fire truck arrived on scene and remained on scene until the patient was transported to the hospital. ■



From left: State EMS Board Chair Clay B. Stamp; Captain Vincent Pyle, City of Cumberland Fire Department (accepting for Sophia Ritchie; Associate State EMS Medical Director for Pediatrics Dr. Jennifer Anders; Captain Douglas Beitzel, City of Cumberland Fire Department (accepting for Kai'Ree Emerson); EMSC Program Director Cyndy Wright-Johnson; MIEMSS Executive Director Dr. Ted Delbridge.



From left: MIEMSS Executive Director Dr. Ted Delbridge; Megan Leatherwood; Associate State EMS Medical Director for Pediatrics Dr. Jennifer Anders.

FIFTEEN-YEAR-OLD Megan Leatherwood heard a loud, unexplained noise coming from where her mother, Melanie, was working in their home. When she went to investigate, Megan found her mother unresponsive. She immediately dialed 9-1-1. The call-taker helped Megan determine that her mother was in cardiac arrest, and walked the teen through providing chest compressions until EMS arrived on scene. After 12 minutes of resuscitative efforts, Montgomery County Fire and Rescue Service personnel achieved ROSC and transported Melanie to Holy Cross Hospital, where she was discharged 10 days later, neurologically intact. ■

THE RIGHT CARE WHEN IT COUNTS AWARDS

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From left: MIEMSS Executive Director Dr. Ted Delbridge; Jacob Macdonald; Associate State EMS Medical Director for Pediatrics Dr. Jennifer Anders.

SEVENTEEN-YEAR-OLD Jacob Macdonald had just wrapped up soccer practice at Rockville's Wootton High School when he happened upon a chaotic scene unfolding near the gymnasium. A man who had been playing a pickup basketball game inside the gym had suffered cardiac arrest. Jacob rushed into the gym and found that a bystander had initiated CPR on the patient, who was not breathing and without a pulse. Noting the bystander was growing fatigued, Jacob informed him that he knew CPR and soon took over chest compressions. Meanwhile, others left the gym to locate the on-site AED and place a call to 9-1-1 (which had been impossible inside the gym due to lack of cell phone service). Jacob also assisted in the application of the AED prior to EMS arrival. After achieving ROSC, Montgomery County Fire and Rescue Service personnel transported the patient to a nearby hospital, where he was discharged a week later, neurologically intact and without deficits. ■

Nominations for the 2024 Maryland EMS Awards are now being accepted.

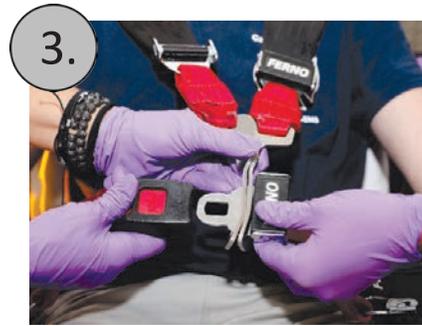
Scan the QR code at right to submit nominations or for more information.



Ferno iNX Stretcher

Securing the Patient

1. Unbuckle all straps in preparation for the patient.
2. Position patient in center of stretcher with patient's back flat, and buttocks at the joint of the stretcher.
3. Lay shoulder straps on the patient's chest with the red webbing and metal links extended to the patient's waist.
4. Take the pelvis strap buckle (male part) and guide it through the slots in the shoulder strap links. Buckle the pelvis strap to connect all red parts.
5. Adjust the shoulder and pelvis straps to be snug on the patient.
6. Fasten the black chest strap across the patient's rib cage.
7. Fasten the black leg restraint over the patient's legs and snug.



* Some older Ferno stretchers may use a different shoulder restraint. Refer to the appropriate Ferno manual and videos for complete instructions and information on product storage and maintenance.

Published September 2023

COMING SOON FROM MIEMSS: Updated laminated pages for the *Safe Transport of Children Reference Guide* to add to your existing reference guide. For further information, please contact cps@miemss.org.

Stryker Power Pro XT Stretcher (With XPR restraints*)

Securing the Patient

1. Unbuckle all straps in preparation for the patient.
2. Position patient in center of stretcher with patient's back flat, and buttocks at the joint of the stretcher.
3. Lay one shoulder strap diagonally across the patient's chest, buckle, and snug the harness. Repeat with other shoulder strap crossing the chest.
4. Position the waist restraint over the patient's pelvic bones. Buckle it and snug the strap.
5. Place the leg restraint over the upper legs. Buckle and snug the straps.
6. Fasten the second leg restraint over the patient's lower legs. Buckle and snug the strap.



* Some older Stryker stretchers may use a different shoulder restraint. Refer to the appropriate Stryker manual and videos for complete instructions and information on product storage and maintenance.



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STAR OF LIFE...

(Continued from page 9)

care.

■ **Urbana Volunteer Fire & Rescue.** Chief James May (EMT-B).

■ **United Steam Fire Engine Company #3.** Chief Jerry Dorsey, Jr. (EMT-B); Firefighter Daryenne Dorsey (EMT-B).

■ **Frederick County Division of Fire and Rescue Services.** Assistant Chief David Barnes (EMT-P); Battalion Chief Steven Schultz (EMT-B); Battalion Chief Jeremy Wade (EMT-B); Lieutenant Larry Kessler (EMT-B); Lieutenant Stephen Jones (EMT-B); Lieutenant William Staub (EMT-B); Lieutenant Robert Smith II (EMT-B); Lieutenant Jordan Coe

(EMT-B); Lieutenant Jesse Springirth (EMT-B); Lieutenant Josef Chlebowski (EMT-P); Lieutenant Jacob Harne (EMT-P); Lieutenant Kevin Creager (EMT-B); Technician Micah Wiles (EMT-B); Technician Robert Fitez, Jr. (EMT-B); Technician James McWilliams (EMT-B); Technician Wesley Hogg (EMT-B); Technician Ryan Conrad (EMT-B); Fire Medic Michael Kelly (EMT-P); Fire Medic Christopher Stewart (EMT-P); Fire Medic Steven Barceñas (EMT-P); Firefighter Brandyn Thomas (EMT-B); Firefighter Cody Green (EMT-B); Firefighter Thomas Fuller (EMT-B); Firefighter John Hurd (EMT-B); Firefighter Andrew Hollenbeck (EMT-B); Firefighter

Nicole McConnell (EMT-B); Firefighter Jacob Schott (EMT-B); Firefighter Corey Rice (EMT-B); Firefighter Chase Sherrard (EMT-B); Firefighter Austin Main (EMT-B); Firefighter Daniel De La Carrera (EMT-B); Firefighter Eric Wetzel (EMT-B); Firefighter Kyle Pinon (EMT-B); Firefighter Daniel Minnick (EMT-B); Firefighter Christopher Pyles (EMT-B); Firefighter David Toth (EMT-B); Firefighter/Paramedic Rob DeGrange.

■ **Maryland State Police Aviation Command,** Trooper 1. Pilot Joshua Chason; Flight Medic Christopher Tappan; Pilot Matthew Hart; Rescue Technician Matthew Brophy. ■

BLOOD ON BOARD...

(Continued from page 1)

jured patients are often transported via medevac to reduce the amount of time needed to receive definitive care at a designated trauma center.

“Injury is the quintessential time-sensitive disease,” said Scalea. “If you’re in hemorrhagic shock and get to the hospital with a low-but-still-decent blood pressure, you’re chance of survival is about 30-40%. If you proceed into cardiac arrest, your survival rate is under 1%.”

“With a program like this, our Aviation Command is not just getting patients to the hospital,” said Butler. “They’re increasing the chances of long-term survival.”

In recent years, the United States military and a growing number of trauma centers across the country have adopted the use of whole blood



Scan this QR code to watch the August 21 Blood on Board press conference.

– which includes red cells, white cells, and platelets, suspended in plasma – in trauma care to improve bleeding control in the most severely injured patients.

“The Blood on Board program is

already saving lives,” said Floccare, who estimates that between one and two patients each week will benefit from the initiative. “We’re hopeful that it will also allow our patients to more fully return to the lives they loved prior to their injuries.”

“At UMMC, our mission is first and foremost to provide the highest quality and compassionate care for Marylanders,” said Cummins. “That means leveraging our world-class expertise and long-standing partnerships to advance patient care, and by pushing the boundaries of what’s possible and transforming care delivery.”

“All of this is made by possible by an incredible partnership of folks who bring their expertise and resources to bear to help people at their times of greatest need, save lives, and make Maryland a better place,” said Delbridge. ■

PATC Instruction Cards and Posters

THE MARYLAND-NATIONAL CAPITAL REGION EMERGENCY RESPONSE SYSTEM (MDERS) has taken a proactive approach to enhancing public safety through the development of informative instruction cards and posters under the Public Access Trauma Care (PATC) program. With a commitment to equipping the community, MDERS has successfully distributed 10,000 instruction cards and 1,000 posters to dedicated partners across Montgomery and Prince George's Counties. These invaluable resources deliver clear, step-by-step guidance on fundamental life-saving medical techniques, empowering individuals to administer crucial aid to victims grappling with life-threatening bleeding, penetrating trauma, hypothermia, and other severe injuries. By bridging the gap between emergencies and professional medical assistance, creating and disseminating these instructional materials significantly amplify individual preparedness to offer timely, life-saving medical interventions.

As part of the PATC program, medical supplies have been strategically placed in public schools and government buildings throughout the Maryland-National Capital Region (MD-NCR). For those supplies to be effectively utilized, individuals must be able to identify injury patterns and render appropriate aid. MDERS has developed training videos a mobile application and worked closely with regional partners to ex-

pand training opportunities related to PATC. However, MDERS staff identified a need for accessible materials that individuals can easily reference.

MDERS determined that instruction cards and posters will allow individuals to review PATC skills in a quick and efficient manner. Working closely with an outside vendor, the MDERS team developed and fi-



nalized these materials to distill the needed information into simple instructions supported with detailed illustrations. The foldable instruction cards contain instructions and illustrations on how to apply a chest seal, apply direct pressure, apply a tourniquet, pack a wound, and prevent shock. The posters provide the same information but also include a section on what individuals should do

in an emergency situation. Introducing these materials to the public will add an outlet for individuals to learn about and practice PATC skills.

Within the last month, the following entities have received instruction cards and posters:

- Montgomery College (200 instruction cards and 20 posters)
- Montgomery County Office of Emergency Management and Homeland Security (500 instruction cards and 50 posters)
- Montgomery County Public Schools (4,000 instruction cards and 400 posters)
- Prince George's County Office of Homeland Security and Emergency Management (500 instruction cards and 50 posters)
- Prince George's County Public Schools (4,000 instruction cards and 400 posters)
- The Universities at Shady Grove (100 instruction cards and 10 posters)
- The University of Maryland Global Campus (50 instruction cards and 10 posters)

MDERS has the remaining materials for training and potential delivery to other stakeholders.

Distribution and placement of these educational materials will increase awareness of the PATC program and provide readers with invaluable information to review and implement during an emergency. For more information about the PATC program, please visit publicaccessstraumacare.org or email mders.training@maryland.gov. ■

Maryland Department of Transportation Motor Vehicle Administration's (MDOT MVA)

Maryland Highway Safety Office

The MDOT MVA Highway Safety Office (MHSO) is dedicated to saving lives and working with many partners across the State to reduce the number of crashes each year. In addition, the MHSO looks for ways to reduce crash severity and ways to treat crash victims easier and faster.

Maryland aims to reduce the number of crashes, and the resulting deaths and injuries, to zero by 2030.

Brush Up on Child Passenger Safety

If you are a caregiver of children, at some point they are likely riding in your vehicle. It's important to make sure that the children in your care are always riding safely, as seats require regular adjustment and replacement as children grow.

Ensure your youngest passengers are always riding safely by reviewing our [Child Passenger Safety information](#) and get tips on [proper seat installation](#). If you need additional assistance, our partners at Maryland Kids in Safety Seats (MD KISS) offer FREE in person car seat checks regularly throughout the state. Find more information and schedule an appointment on their [website](#).

A few small steps and regularly checking to ensure your child still fits their seat will keep them riding safely until they are ready to ride safely in only a seat belt. You'll know they're ready when they can pass the [five-step test](#)!



Emphasis Area Team Meetings

Looking to become more involved in local road safety? MHSO welcomes participation from the EMS community for all emphasis areas. Mark your calendar for the upcoming meetings:

- Impaired Driving – Emphasis Area Team:
October 23, 2023 (10:00 a.m. – 1:00 p.m.)

Register on our website at [ZeroDeathsMD.gov/events](https://www.ZeroDeathsMD.gov/events)

Help Us Keep Road Workers Safe in Work Zones

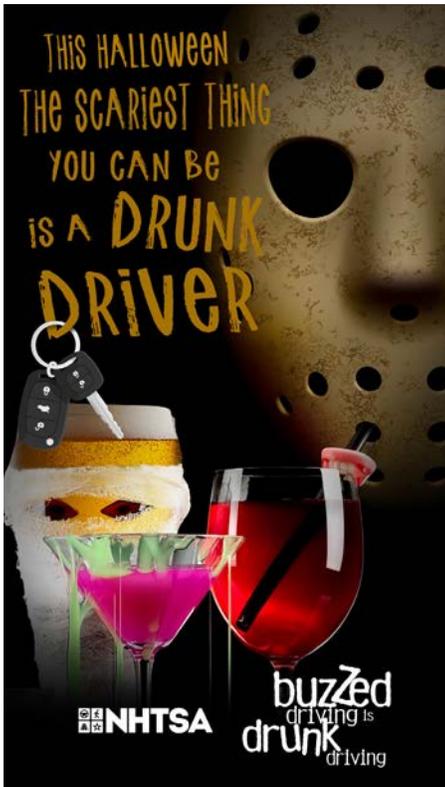
Every day, there are hundreds of active work zones across Maryland. These work zones are intended to alert motorists to the presence of road workers and protect them as they complete necessary repairs and roadway improvements.

Unfortunately, all too often, road workers are being injured or killed in crashes resulting from unsafe driving practices in active work zones. Speeding, distracted driving, impairment and other conscious decisions made by drivers are putting our road workers' lives in jeopardy and we must do better.

The Work Zone Safety Work Group, chaired by Lt. Governor Aruna Miller, is working to develop recommendations for improving work zone safety. As part of their efforts, they are conducting a work zone safety survey and requesting feedback from drivers throughout the state on how their driving behaviors might be influenced to increase the safety of work zones. The short survey can be completed at www.ZeroDeathsMD.gov/WZSurvey, and will be open for responses through October 12. We appreciate you taking the time to help us keep road workers safe.



Prevention



THE NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION (NHTSA) has prepared materials for use by law enforcement and public safety personnel for the following upcoming public safety and prevention campaigns:

■ **National Teen Driver Safety Week** (October 15 – 21, 2023). Parents should talk with their teens about the important rules they must follow to stay safe behind the wheel of a motor vehicle. Download materials here: <https://www.trafficsafetymarketing.gov/get-materials/teen-safety>

■ **National School Bus Safety Week** (October 16 – 20, 2023). School buses are the safest way to transport children to and from school. However, teaching children to follow safety rules on the bus is just as important as informing drivers about the laws regarding school buses. Download materials here: <https://www.trafficsafetymarketing.gov/get-materials/school-bus-safety>

■ **Halloween** (October 31, 2023). The only thing scarier than zombies and witches loose on the streets is an impaired driver. This Halloween, let's make happy memories, not tragic nightmares. Download materials here: <https://www.trafficsafetymarketing.gov/get-materials/drunken-driving/buzzed-driving-drunken-driving/halloween>

■ **Thanksgiving Weekend** (November 22-26, 2023). Thanksgiving Weekend is one of the busiest travel times of the year. Unfortunately, more people on the roadways means the potential for more vehicle crashes. Download materials here: <https://www.trafficsafetymarketing.gov/get-materials/others/thanksgiving-weekend>. ■

~ Maryland EMS News "Save the Date" Calendar ~

OCTOBER

- 7: Maryland Fire-Rescue Services Annual Gala (date rescheduled)

FEBRUARY 2024

- 2-4: Winterfest EMS

MARCH 2024

- 7-9: Miltenberger Emergency Services Seminar

MAY 2024

- 19-25: National EMS Week

JUNE 2024

- 2: Maryland Fire-Rescue Services Annual Memorial Service
- 15-20: 132nd Maryland State Firemen's Association Annual Convention & Conference

Submit events to Patrick Tandy at ptandy@miemss.org.

EMS NEWS DIGEST...

(Continued from page 2)

Services Office of Climate Change and Health Equity, in partnership with the National Highway Traffic Safety Administration, has launched a first-of-its-kind data dashboard. The Heat-Related Illness EMS Activation Surveillance Dashboard, or EMS HeatTracker, maps EMS responses to heat-related illness across the country. It draws data from the National EMS Information System, which captures patient records from approximately 95% of all EMS agencies in the US states and territories. Read more: <https://www.usfa.fema.gov/blog/new-ems-heattracker-helps-understand-and-reduce-health-risks/>

■ **UM Students Using Drones to Help Fire Crews** (*WUSA9*). Students at the University of Maryland Clark School of Engineering in Col-

lege Park won the National Institute of Standards and Technology National First Responder Indoor Challenge by designing a drone capable of flying indoors and seeing through darkness, smoke, and unbreathable air, enabling first responders to search for victims and assess conditions. Read more: <https://www.wusa9.com/article/news/local/maryland/drone-competition-university-of-maryland-students-win-life-saving-search-and-rescue-techology/65-983af986-2904-491b-8993-285362655f7a>

■ **Garrett County Names New Director of Emergency Management** (*Garrett County Government*). Samuel Grant, MS, NRP, MDPEMP, has been appointed Director of Emergency Management for Garrett County, bringing with an extensive background in emergency services, disaster preparedness, and executive fire

leadership. Read more: <https://www.garrettcountry.org/news/2023/09/grant-new-director-of-emergency-management>

■ **Practical Examples of Customer Service Principles in EMS** (*EMSI*). While the primary focus of EMS is to deliver timely and efficient medical care, the principles of customer service are equally significant. Exceptional customer service in EMS ensures not only the delivery of competent medical aid but also compassion, understanding and support during stressful situations. Read more: <https://www.emsl.com/leadership/articles/practical-examples-of-customer-service-principles-in-ems-82iz1oJAuSZGRePZ/>

Submit recent EMS-related news and headlines for consideration to ptandy@miemss.org. ■

Maryland EMS News

MIEMSS

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Baltimore, MD 21201-1536



Governor Wes Moore

Lt. Governor Aruna Miller

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(unless noted otherwise)

EMS PROTOCOLS...

(Continued from page 3)

to evaluate carotid blood flow during cardiac arrest and CPR to inform the timing of transport and termination of resuscitation decisions. This change may also serve to limit interruptions in CPR for pulse checks.

■ **Wilderness EMS:** Wilderness

EMS teams may now administer epinephrine and tranexamic acid (TXA) without the requirement for a 100 mL bag.

The 2023 *Maryland Medical Protocols for Emergency Medical Services* are available online at <https://miemss.org/home/ems-providers/protocols>. ■

CORRECTION

An earlier version of this issue incorrectly identified the name and date of the Miltenberger Emergency Services Seminar listing in the *Maryland EMS News* "Save the Date" Calendar on page 23.

The editor regrets the error.