SB0649-EEE_MACo_SUP.pdf
Uploaded by: Kevin Kinnally
Position: FAV

MARYLAND Association of COUNTIES

Senate Bill 649

Public Safety Answering Point Personnel - Training in Telecommunications Cardiopulmonary Resuscitation

MACo Position: **SUPPORT**

To: Education, Energy, and the Environment Committee

Date: February 22, 2024

From: Kevin Kinnally

The Maryland Association of Counties (MACo) **SUPPORTS** SB 649. This bill requires the Maryland 9-1-1 Board to establish training standards for public safety answering point personnel based on national best practices for high-quality telecommunicator cardiopulmonary resuscitation (T-CPR). In addition, the bill clarifies that any local expenditures for counties that provide T-CPR training are reimbursable by the 9-1-1 Trust Fund.

Every year in the United States, more than 350,000 people have a sudden cardiac arrest outside of a hospital environment. Sudden cardiac arrest is the unexpected loss of heart function, breathing, and consciousness and is commonly the result of an electric disturbance in the heart. Unfortunately, only 1 in 10 victims survive this dramatic event.

A critical intervention strongly associated with survival is cardiopulmonary resuscitation (CPR), started by a bystander. When CPR begins before the arrival of emergency medical services (EMS) personnel, the individual in cardiac arrest has a two- to three-fold higher likelihood of survival.

One way to ensure CPR is provided quickly is for 9-1-1 specialists to give instant instructions with telecommunicator CPR. T-CPR allows bystander CPR to begin – it works by keeping the brain and heart alive until EMS arrives to provide defibrillation and other vital interventions. T-CPR can assist the untrained caller and remind the CPR-trained caller how to provide high-quality CPR.

SB 649 ensures critical training for 9-1-1 specialists, so they can assist a caller in providing CPR. The provisions in this bill will save lives and keep communities safe. Accordingly, MACo urges the Committee to issue a **FAVORABLE** report on SB 649.

KGSWrittenTestimony on SB649 022124.pdf
Uploaded by: Kevin Seaman
Position: FAV

Kevin G. Seaman, M.D., FACEP, FAEMS

Testimony

Greetings esteemed Senators.

I am Dr. Kevin Seaman, Medical Director of the Maryland Resuscitation Academy, testifying here today on SB 649. In addition, I have extensive experience in EMS, directing multiple county EMS systems as the Medical Director, as well as directing the Maryland State EMS system, the Maryland Institute for Emergency Medical Services Systems.

The Maryland Resuscitation Academy was founded 12 years ago supporting the aspirational goal to live in Maryland where NO ONE dies of sudden out-of-hospital cardiac arrest. Since 2012 we have held 37 educational offerings, educating over 2000 EMS clinicians in techniques to save more lives from cardiac arrest. We have learned that:

- Bystander CPR can double survival from out-of-hospital cardiac arrest (OHCA)
- Telephone CPR can double survival from OHCA.
- Defibrillation using a public access defibrillator can double survival.

Assertive 911 Specialists/Telecommunicators, through initial training and frequent refresher training are the best method to get bystander CPR for all victims experiencing OHCA.

Time is our enemy. We have 600 seconds to save a life, before the brain dies and life slips away.

Bystander CPR, delivered before EMS arrives, can extend the interval in which bystander CPR and defibrillation using an AED is effective by an additional 4 minutes.

Our history in Maryland helps to explain where we were and help us decide where we want to go.

In 1976, Dr. R. Adams Cowley, the founder of our statewide EMS system in Maryland, stated that cardiovascular disease is our number one killer and observed that we have 10 minutes (600 seconds) to save a live.

In the early 1990's, Dr. Robert Bass advanced prehospital care by requiring county Public Service Answering Points (PSAPs)l who elected to do Pre-Arrival Instructions (PAIs), to use a Dispatch program to answer calls and provide PAIs.

Also, in the 1990's regulations required PSAPs to review 911 medical calls for quality purposes. The requirement was 3% of all calls, selected randomly, in smaller volume centers. Similarly, in large volume centers the requirement was 2% of all calls. There

were no diagnosis nor topic-related reviews that were required, including no requirement to review cardiac arrest calls.

I was fortunate enough to be invited to be a team member of the American Heart Association's (AHA) Telephone CPR workgroup, working on performance metrics for Telephone CPR. This resulted in on-line resources and published Policy Statements on Telephone CPR. Two important results:

Operational Commitment for a Successful Telephone CPR Program

1. Commit to T-CPR
2. Provide Initial and **ONGOING** Education in Telephone CPR for all telecommunicators.
3. Conduct Effective and Continuous Quality Improvement review of cardiac arrest calls.
4. Connect to an EMS Agency
5. Designate a Medical Director
6. Recognize outstanding Performance.

AHA Performance Metrics for Telephone CPR

American Heart Association Telephone CPR Performance Metrics		
Time (in seconds)	Call Transfer to OHCA Recognition	Call Transfer to delivery of first T-CPR compression
Minimum Acceptable Standard	< 90	< 150
High Performing EMS System	< 60	< 90

It's Performance, not Protocol

Despite having telephone CPR directions written in protocol, this does not result in universal, effective bystander/caller chest compressions coached by public safety professionals due to many barriers to providing telephone CPR instruction and having it delivered.

The best practice operational commitments listed by the AHA above require ongoing education in telephone CPR for all telecommunicators. In most centers this is not done currently.

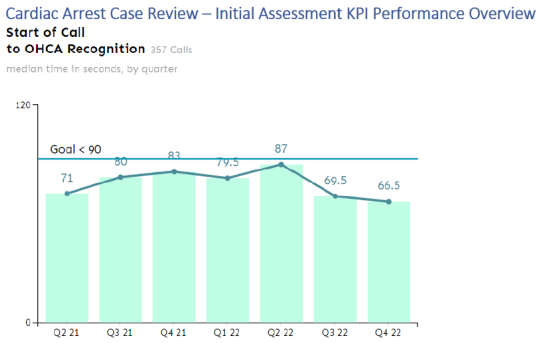
Under Effective and Continuous Quality Improvement the recommendation is that all out-of-hospital cardiac arrest calls be reviewed. Since the 1990's those 911 Centers using Dispatch protocols and providing Pre-Arrival instructions, have been required to review 2% of calls handled in larger volume centers and 3% of calls in lower volume centers. These calls are selected randomly and there is no requirement to review 911 calls by

complaint type, for example, cardiac arrest. Without requiring performance in ongoing training and feedback through quality improvement, lives too good to die are lost.

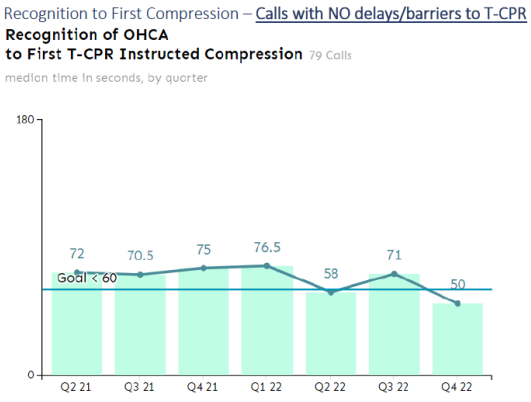
Only through implementation can we change behavior and thus, save the most lives from OHCA.

Charles County Results – 4+-year pilot of T-CPR

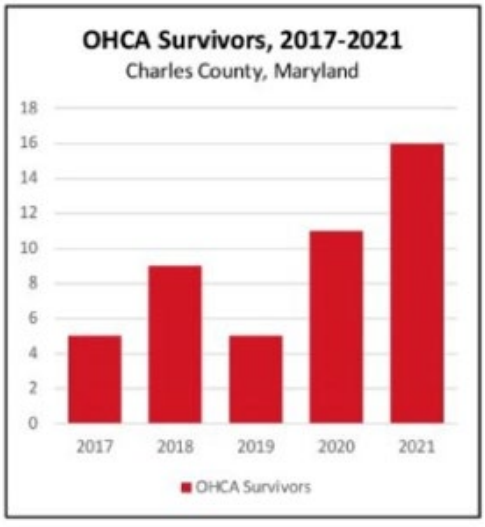
Over the past four plus years, Charles County 911 Center has intently followed the AHA recommendations, every 911 Specialist/telecommunicator (TC) completing a 15 minute, high-fidelity simulation every three months, taking them from entry level performance through intermediate then, onto mastery level competence recognizing cardiac arrest, overcoming barriers and assertively coaching bystanders to deliver chest compression CPR. Coupled with the simulation, quality improvement review of 911 calls with feedback to the 911 Specialist has 'closed the loop' and carried all TCs to improved performance and saved many lives.



Charles County 9-1-1 Fire/EMS Communications – Q4 2022



Charles County 9-1-1 Fire/EMS Communications – Q4 2022



Summary

A mantra from the Resuscitation Academy, Measure, to Improve, exemplifies that only through measurement do we know where we start, implement T-CPR training and, through re-measurement we assess our improvement.

Charles County has implemented intensive recertification training in telephone CPR and coupled with QI review of actual 911 calls for cardiac arrest this has been associated with improvements in survival, lives saved. This lifesaving training must be implemented in every county and city 911 center across Maryland to realize maximal lives saved. Where you live should not determine if you live.

Time is the enemy; we have 600 seconds to save a life. The 911 Specialist owns the first 600 seconds of a cardiac arrest. They control the first 3 ½ rings of the chain of survival. Telephone CPR coached CPR by bystanders, coached by assertive 911 Specialist can double survival from cardiac arrest.

These lives can only be saved if we implement educational programs that change behavior and save the most lives. Performance, not Protocol. Save the most lives; Every patient in Ventricular Fibrillation (VF) can survive; we need to strive to make that a reality.

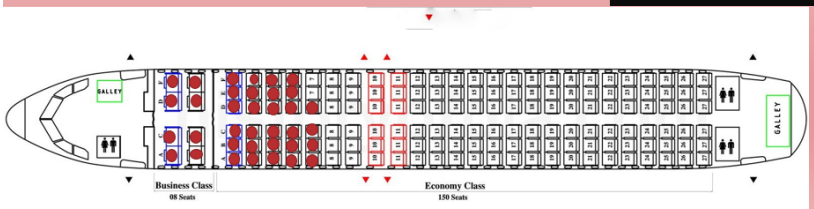
To truly move the needle on cardiac arrest survival we must educate our dispatchers with low-dose, high-frequency education, producing mastery level competence in recognition of cardiac arrest and in coaching bystander to deliver hands-only CPR before EMS arrives.

Let’s all work toward a world where no one dies of sudden cardiac arrest in Maryland; pass SB0649 and we take the first step toward implementing performance metric exceeding actions resulting in bystander chest compressions and start the journey toward saving maximal lives in Maryland.

You are familiar with Captain Sully’s Miracle on the Hudson. In Charles County they are tracking progress by putting each survivor in an airline seat, documenting our progress. When we fill the Charles County airliner, our miracle will have been realized in Charles County.

Answering the call, saving lives!

Miracle on the Hudson



- Life saved from cardiac arrest in Charles County Data (CARES)

Innovative Adult Learning

- Low Dose
- High Frequency

Support SB 649 TCPR American Heart Association .pd
Uploaded by: Laura Hale
Position: FAV

February 21, 2024

Testimony of Laura Hale
American Heart Association
Support SB 649 Public Safety Answering Point Personnel - Training in Telecommunications Cardiopulmonary Resuscitation

Dear Chair Feldman, Vice Chair Kagan and Honorable Members of the Education, Energy, and Environment Committee,

Thank you for your time and consideration on this important legislation for heart health. My name is Laura Hale and I am the Director of Government Relations for the American Heart Association. The American Heart Association extends its support SB 649 Public Safety Answering Point Personnel - Training in Telecommunications Cardiopulmonary Resuscitation and support the amendments that have been offered by the sponsor.

We applaud Sen. Kagan for her leadership in strengthening 911 response in the state of Maryland.

In Maryland, 911 specialists are the first link in the chain of survival and have the ability to make a difference in saving the life of someone experiencing cardiac arrest. For every minute that intervention is delayed, chance of survival decreases by 10%. Having continuing education and access to training in how to be assertive to get the public to start CPR and for 911 specialist to better identify a cardiac arrest is essential to saving lives. When Telecommunicator CPR happens there is an improvement in survival rates and functional outcomes after out of hospital cardiac arrest[1].

There are 350,000 out of hospital cardiac arrests every year in the US. And that is out of hospital, which means the person calling 911 is likely a family member, friend, coworker. Telecommunicator CPR or TCPR is a training that gives 911 specialists the tools and knowledge they need to calmly walk a likely frantic and potentially untrained caller through CPR. This training has been shown to increase the chance of survival by 51%.

For all the data that we see nationwide, we've also seen it happen here in Maryland, where Charles County has piloted a very successful program that has shown strong quality improvement in lives saved. We want every county in Maryland to have access to this kind of training so that we have more lives saved.

The American Heart Association urges a favorable report on this legislation.

[1] Zhixin Wu, Micah Panczyk ,*, Daniel W. Spaite, Chengcheng Hud,Hidetada Fukushima, Blake Langlais , John Sutter Bentley J. Bobrowb, Telephone cardiopulmonary resuscitation is independently associated with improved survival and improved functional outcome after out-of-hospital cardiac arrest.

Testimony for 911 Bill Dr Lili Barouch revised.pdf
Uploaded by: Lili Barouch
Position: FAV

Testimony for 911 Bill Dr Lili Barouch

Dr. Lili Barouch, Associate Professor of Medicine, Director of Sports Cardiology, Johns Hopkins Heart Failure Group

It is truly a moment of life or death when a call to 911 is placed after someone collapses in cardiac arrest. Many people don't know CPR, or even if they do, have never used it or may panic and be unable to act without prompting.

Recently a patient of mine suffered a cardiac arrest at home. His wife was upstairs when she heard a thud. She ran downstairs and saw her teenage daughter frozen in panic and her husband lying on the floor. Neither of them knew CPR. She called 911 and thankfully EMTs came very quickly and were able to defibrillate him. He was incredibly lucky that he survived, but that quick of a response from EMS isn't always possible. His wife has suffered terrible guilt for not knowing CPR and not knowing what to do, almost at a level of PTSD. She cried in my office. She keeps getting asked by friends and family if she did CPR and feels terrible saying no and having to explain herself over and over.

Not everyone is so lucky. A colleague of mine cared for a high school student who collapsed at a sports event at a local high school. A bystander called 911 but was told "not to touch him since it sounded like he was having a seizure". Unfortunately, the apparent seizure was a cardiac arrest, and the student did not get CPR for over 10 minutes while they waited for an ambulance. Tragically, although doctors were eventually able to restart his heart, this student is nearly brain dead now.

You may not realize how time-critical survival is in cases of cardiac arrest. Survival goes down by 10% PER MINUTE if someone isn't getting CPR. A delay of only 5 minutes before CPR is started leaves you with only a 50-50 chance of making it. After 10 minutes, you're basically a goner, or you will have severe brain damage. Being coached to start CPR immediately, within 1-2 minutes, could be the difference between life and death for many victims of cardiac arrest. The importance of more training for our 911 specialists will be lifesaving, and this bill will allow for that.

Kagan 2024 Testimony SB649.pdf
Uploaded by: Sen. Cheryl Kagan
Position: FAV

CHERYL C. KAGAN
Legislative District 17
Montgomery County

Vice Chair
Education, Energy, and
the Environment Committee

Joint Audit and Evaluation Committee
Joint Committee on Federal Relations

Miller Senate Office Building
11 Bladen Street, Suite 2 West
Annapolis, Maryland 21401
301-858-3134 · 410-841-3134
800-492-7122 *Ext.* 3134
Fax 301-858-3665 · 410-841-3665
Cheryl.Kagan@senate.state.md.us

THE SENATE OF MARYLAND
ANNAPOLIS, MARYLAND 21401

Public Safety Answering Point Personnel - Training in T-CPR (SB649)
Senate Education, Energy, & the Environment Committee: February 22, 2024, 1:00pm

When a loved one is having a medical emergency, we all know that we should call 9-1-1. But then we wait. In many parts of our State, EMS response times can be 10 minutes or longer.[1] Rain, wind, snow, and ice can delay the arrival of First Responders because of hazardous road conditions. Too often, help does not arrive in time.

Roughly 350,000 Americans die every year from out-of-hospital cardiac arrest.[2] "The chance of survival from cardiac arrest decreases by 10% with every minute that passes without CPR," says Dr. Kevin Seaman, medical director for the Charles County's 9-1-1 Center and EMS program. "The process of getting units started, getting units to the scene, starting CPR, defibrillation— that can take nine minutes, or even longer." But telecommunications CPR-- or T-CPR--, the virtual instruction by a specialist on the steps of performing CPR, saves lives. According to the American Heart Association, "When CPR begins prior to the arrival of emergency medical services personnel, the person in cardiac arrest has a two to three-fold higher likelihood of survival."

SB649 includes quarterly one-on-one continuing T-CPR education for county 9-1-1 Specialists as an authorized expenditure of the 9-1-1 Trust Fund. This will allow the Fund to help train 9-1-1 Specialists across Maryland on best practices for saving lives.

This bill was motivated by a T-CPR pilot program conducted in Charles County. Due to this program, the number of cardiac arrest survivors more than doubled, at a cost of just $26,000 per year to train all 40 9-1-1 Specialists on staff. This bill will increase the potential for any county that opts in to see results like those in Charles County-- potentially saving the lives of hundreds of Marylanders each year.

In collaboration with the Maryland Department of Emergency Management (MDEM) and the Maryland Institute for Emergency Medical Services Systems (MIEMSS), I am introducing an amendment to this bill that will remove specific training directions, as these are broadly included in current law.

I urge a favorable report on SB649, as amended.

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[1] Dance, Olivia. "Allegany County EMS Records Fastest 911 Response Times in County History." WBFF, March 16, 2023. https://foxbaltimore.com/news/local/allegany-county-ems-records-fastest-911-response-times-in-county-history.
[2] Centers for Disease Control and Prevention. "Cardiac Arrest | Cdc.gov," May 30, 2023. https://www.cdc.gov/heartdisease/cardiac-arrest.htm#:~:text=More%20than%20356%2C000%20people%20have.

FWA - MDEM - SB649 - PSAP CPR Training w Amendment

Uploaded by: Anna Sierra

Position: FWA

FAVORABLE WITH AMENDMENTS - SB649
Public Safety Answering Point Personnel - Training in Telecommunications Cardiopulmonary Resuscitation

Maryland Department of Emergency Management
Hearing Date: 22 FEB 2024

Chairman Brian Feldman
Education, Energy, and the Environment Committee
2 West
Miller Senate Office Building
Annapolis, MD 21401

Chairman Feldman,

The Maryland Department of Emergency Management (MDEM) writes **in support with amendments of SB649 - Public Safety Answering Point Personnel - Training in Telecommunications Cardiopulmonary Resuscitation**.

The role 9-1-1 specialists play in out-of-hospital cardiac arrest is critical in the chain of survival. Public Safety Answering Points take this role seriously, as do both the Maryland Institute for Emergency Medical Services Systems and the Maryland 9-1-1 Board. **The Department is in no way against providing additional, targeted training and quality assurance/improvement related to out-of-hospital cardiopulmonary resuscitation for 9-1-1 specialists.** However, the Maryland 9-1-1 Board and the Maryland Institute for Emergency Medical Services Systems are already empowered by law to establish these requirements and legislation is not required to accomplish the intent of this bill.

Requested Amendment: remove lines 11 through 20 on page two (see attachment); remove the reference to §1-306(15)(iv) at the end of line 3, page 3.

Establishing call-type specific requirements in law is not in the best interest of the 9-1-1 system. Legislating requirements for individual call types will inevitably lead to out-dated statute, and opens the door for future call-type specific legislation that could be misaligned with or contrary to national protocol standards followed by Public Safety Answering Points. The 9-1-1 Board is committed to working with

MIEMSS and other stakeholders to incorporate any changes required to PSAP training through the Board's Training Subcommittee.

Existing Statute

The 9-1-1 Board has the responsibility to establish training standards for all 9-1-1 specialists under §1-306:

(b) The Board's responsibilities include (15) establishing training standards for public safety answering point personnel based on national best practices.

The requirement for PSAPs to use standards-based protocols is also already codified in law under PS §1-304.1:

(a)(1) Each public safety answering point shall employ standards–based protocols for the processing of 9–1–1 requests for emergency assistance.

PSAPs are also required by law to ensure 9-1-1 specialists are trained to those standards:

(a) (2) A public safety answering point shall ensure that each 9–1–1 specialist employed by the public safety answering point is certified in each discipline related to 9–1–1 requests for assistance for which the 9–1–1 specialist is responsible for receiving and processing.

Standards for instructions given to individuals experiencing a medical emergency are governed by MIEMSS for all Emergency Medical Dispatchers. Section 13-510 of the Education Article gives MIEMSS the authority to:

(4) Coordinate the training of all personnel in the Emergency Medical Services System and develop the necessary standards for their certification or licensure;

Emergency Medical Dispatcher is defined as an EMS provider in Section 13-516(a):

(7) "Emergency medical services provider" means an individual licensed or certified by the EMS Board as:

(ii) An emergency medical dispatcher;

In conclusion, MDEM urges the Committee move SB649 - Public Safety Answering Point Personnel - Training in Telecommunications Cardiopulmonary Resuscitation favorable with the proposed amendments.

If you have any questions, please contact Anna Sierra, MDEM legislative liaison: anna.sierra1@maryland.gov.

SENATE BILL 649

E4 4lr2019
CF 4lr2020

By: **Senator Kagan**
Introduced and read first time: January 29, 2024
Assigned to: Education, Energy, and the Environment

A BILL ENTITLED

AN ACT concerning

Public Safety Answering Point Personnel – Training in Telecommunications Cardiopulmonary Resuscitation

FOR the purpose of requiring the Maryland 9–1–1 Board to establish training standards for public safety answering point personnel concerning telecommunications cardiopulmonary resuscitation; altering the purposes of the 9–1–1 Trust Fund to include funding the costs of certain telecommunications cardiopulmonary resuscitation training; and generally relating to training in telecommunications cardiopulmonary resuscitation for public safety answering point personnel.

BY repealing and reenacting, without amendments,
Article – Public Safety
Section 1–306(a) and 1–308(a) and (b)(3)
Annotated Code of Maryland
(2022 Replacement Volume and 2023 Supplement)

BY repealing and reenacting, with amendments,
Article – Public Safety
Section 1–306(b)(15) and 1–308(b)(2)(viii) and (ix)
Annotated Code of Maryland
(2022 Replacement Volume and 2023 Supplement)

BY adding to
Article – Public Safety
Section 1–308(b)(2)(x)
Annotated Code of Maryland
(2022 Replacement Volume and 2023 Supplement)

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, That the Laws of Maryland read as follows:

EXPLANATION: **CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.**
[Brackets**]** indicate matter deleted from existing law.

Article – Public Safety

1–306.

(a) The Board shall coordinate the enhancement of county 9–1–1 systems.

(b) The Board's responsibilities include:

(15) establishing training standards for public safety answering point personnel based on national best practices, including training concerning:

(i) Next Generation 9–1–1 topics;

(ii) individual psychological well–being and resilience; **[**and**]**

(iii) subject to subsection (e)(2) of this section, implicit bias training; ~~AND~~

~~(IV) HIGH QUALITY TELECOMMUNICATIONS CARDIOPULMONARY RESUSCITATION INSTRUCTION THAT:~~

~~1. UTILIZES THE MOST CURRENT NATIONALLY RECOGNIZED EMERGENCY CARDIOVASCULAR CARE GUIDELINES;~~

~~2. INCLUDES RECOGNITION PROTOCOLS FOR OUT–OF–HOSPITAL CARDIAC ARREST;~~

~~3. INCLUDES CONTINUING INSTRUCTION ON COMPRESSION–ONLY CARDIOPULMONARY RESUSCITATION; AND~~

~~4. ENABLES TRAINEES TO PROVIDE RECOMMENDATIONS FOR TRAINING IMPROVEMENT;~~

1–308.

(a) There is a 9–1–1 Trust Fund.

(b) (2) Subject to paragraph (3) of this subsection, in addition to the purposes described under paragraph (1) of this subsection, the purposes of the 9–1–1 Trust Fund include funding:

(viii) costs to maintain the cybersecurity of 9–1–1 systems, enhanced 9–1–1 systems, and Next Generation 9–1–1 services; **[**and**]**

(ix) costs of 9–1–1 specialist recruitment activities as described in §

1–306(b)(17) of this subtitle**; AND**

(X) COSTS OF TELECOMMUNICATIONS CARDIOPULMONARY RESUSCITATION TRAINING ~~AS DESCRIBED IN~~ § 1–306(B)(15)(IV) ~~OF THIS SUBTITLE~~.

(3) Funding allocated in accordance with paragraph (2) of this subsection may not be utilized for:

(i) the payment of the salary of public safety answering point personnel or county personnel; or

(ii) any purpose associated with the 9–8–8 suicide prevention hotline.

SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect October 1, 2024.

SB 649_PSAP Personnel_Training in TCPR_MIEMSS_Supp
Uploaded by: Theodore Delbridge
Position: FWA

State of Maryland
Maryland Institute *for* Emergency Medical Services Systems

Wes Moore
Governor

Clay B. Stamp
Chairman, EMS Board

Theodore R. Delbridge, MD, MPH
Executive Director

SB 649 – Public Safety Answering Point Personnel – Training in Telecommunications Cardiopulmonary Resuscitation

Bill Summary: SB 649 modifies language for the 9-1-1 Trust Fund to explicitly permit the Fund to be used for telecommunications cardiopulmonary resuscitation (CPR) training and requires the Maryland 9-1-1 Board to establish training standards for public safety answering point personnel.

MIEMSS Position: Support with Amendments Offered by the Maryland Department of Emergency Management.

Rationale:

- Public safety answering point (PSAP) personnel are a critical link in the emergency response system. These 9-1-1 Specialists, who answer calls made to 9-1-1 for all types of emergencies, are able to initiate life-saving interventions for those suffering critical emergencies by instructing callers in life-saving maneuvers until the arrival of emergency medical services (EMS) personnel.

- Training for 9-1-1 Specialists in how to respond to emergency callers – especially callers reporting a likely cardiac arrest – must include specific life-saving skills and practice in conveying instructions on how to apply those skills to citizens at the site of an emergency.

- 9-1-1 Specialists are a critical link in the chain of survival from cardiac arrest, and instruct citizens in how to administer effective CPR and use an Automated External Defibrillator, if available on site, until the arrival of EMS personnel.

- The Maryland 9-1-1 Board has the statutory responsibility of establishing training standards for all 9-1-1 Specialists, and MIEMSS certifies emergency medical dispatchers who meet national standards.

- MIEMSS supports SB 649's provisions that explicitly permit monies from the 9-1-1 Trust Fund to be used for training of 9-1-1 Specialists in Telecommunications CPR.

- MIEMSS believes that SB 649's provisions that would put CPR training standards in statute is not needed as that authority already exists within the Maryland 9-1-1 Board. MIEMSS supports amendments offered by the Department of Emergency Management that would delete those provisions in lines 10 through 21 on page 2.

MIEMSS Supports SB 649 with Amendments Offered by the Maryland Department of Emergency Management