

**2020 BROWARD COUNTY EMS GRANT APPLICATION**  
*"Funding to improve or expand prehospital EMS Systems"*

**Section I**

1. **Project Title:** Broward Pre-Hospital Training and Education

Is this a pilot project?     Yes     No

2. **Project Cost \$:** 80,000

3. **Agency Name:** Hollywood Fire Rescue

Address: 2741 Stirling Road, Hollywood, FL 33312

Telephone: 954-976-4248                      Fax: \_\_\_\_\_

4. **Project Manager:** The individual with direct knowledge of project and responsible for project implementation.

Name: Candace Pineda

Telephone: 954-265-4026                      Email: canpineda@mhs.net

5. **Authorized Signatory:** The individual authorized to sign the application on behalf of the agency or entity.

Name of Signatory: Analdy Garcia

Title of Signatory: DEPUTY CHIEF

6. **Projects Impacting Direct Services to Emergency Victims:** This may include, but is not limited to: vehicles, medical and rescue equipment, communications, dispatch, navigation, and other equipment that impacts on-site treatment. (Countywide projects must offer participation to all licensed EMS providers, based upon levels of service.) Attach Form A.

Countywide:     Yes     No

Multiple Agencies:     Yes     No    How Many? 19

Single Agency:     Yes     No

7. **Projects Impacting Indirect Services:** Training of all types (public, first responders, law enforcement personnel, EMS personnel and other healthcare staff), research, and documentation. (Countywide projects must offer participation to all licensed EMS providers.) Attach Form A.

Countywide:     Yes     No

Multiple Agencies:     Yes     No    How Many? 19

Single Agency:     Yes     No

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**8. Problem/Unmet Need Description:** Provide a narrative of the problem or need and the population affected by describing the present situation and management (if any) and the potential adverse consequences if not addressed.

Trauma continues to be the leading cause of death and disability for people under 40 worldwide (de Schoutete). High quality pre-hospital care is an integral component to any established trauma system and essential in the survival of a patient with a traumatic injury (Smith). As trauma systems and pre-hospital care continues to evolve, the number of potential life-saving procedures in the field continues to increase. Research by Meizoso et al., defined pre-hospital interventions (PHI) as intubation, needle decompression, tourniquet use, cricothyroidotomy, or Advanced Cardiac Life Support (ACLS), and found that approximately 3.5% of patients receive a PHI, most commonly a field intubation (Meizoso). According to data from the Broward County Trauma Agency, there were approximately 220,000 emergency medical service (EMS) calls in 2018; therefore, it can be estimated that a minimum of 7,700 PHIs were performed.

There is a paucity of data on the statistical decrease in pre-hospital provider skillset over time, however, Latman et al., report a 50% decrease within two years. Research by De Lorenzo et al. and Lantman et al., support that directed continuing education (CE) programs can not only help medical first responders to retain an estimated 11% of knowledge but also improve pre-hospital skills (De Lorenzo, and Lantman).

Continuing education requirements are built on the foundation that skills decay over time (De Lorenzo). Therefore, the basic level Emergency Medical Technician (EMT) recertification requires 40 hours of CE [20 national, 10 local and 10 individual] (National Registry of Emergency Medical Technicians). Despite trauma being the leading cause of death for individuals under 40, only 1.5 trauma hours are required for recertification (National Registry of Emergency Medical Technicians). Taking into account the gravity of traumatic injury and the minimal CE requirements, EMTs have the potential to benefit from additional education focused on the management of trauma patients.

Arnold et al., note that the goal of emergency response education is to develop the learner's ability to respond appropriately during an emergency situation and identified several factors that influence the successes of emergency response education. Although didactic teaching provides fundamental knowledge and principles, the classroom setting does not adequately prepare students for a clinical setting (Landers, Arnold). Skill laboratories provide the opportunity for students to practice and master the desired emergency response skill in an isolated environment and similar to didactic learning, does not resemble a "real world" scenario (Arnold). Alternatively, full-scale simulation with high-fidelity manikins are the preferred method to teach emergency response as they allow students to respond to a realistic emergency situation in a controlled practice environment (Arnold).

Providing EMS with education and training opportunities, specifically simulation or combined (didactic with skills practice) will allow EMS to stay current on PHIs, provide advanced level care in the field, support the trauma system, and save innumerable lives.

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**9. EMS Improvement and Expansion to Resolve Problem or Address Needs:**

Describe proposed solutions to the problem and/or need (question #8 – problem description). State the improvements that are reasonably foreseeable and measurable. Use data, scientific, or anecdotal information to support the agency's request. Explain how the project will improve and/or expand prehospital EMS in Broward County. Be specific.

As EMS systems continue to evolve, the need for targeted pre-hospital provider training will continue to increase. Despite the ongoing debate between “scoop and run” and “stay and play”, most EMS have adopted a balanced approach “play without extended stay” which requires critical thinking and competence in the most common PHIs to ensure the most critical patients receive intervention without increasing scene times (Meizoso).

Taking into consideration the burden of traumatic injury and the decrease in clinical skills over time, there is a growing need to allocate resources to ensure EMS retain knowledge and practice life-saving PHIs in a controlled education setting. In an effort to address the following needs: ongoing EMS education, decrease traumatic injury mortality, and training on most common PHI, we propose an initiative offering both PHTLS and an advanced airway class to each of the 19 municipal EMS agencies. The goal with this funding would be to establish at least 2 training centers will be established throughout the county to improve access for both education initiatives. Each EMS agency will have the opportunity to send pre-hospital providers to participate in these trainings.

**Pre-Hospital Trauma Life Support**

Pre-hospital Trauma Life Support (PHTLS) is an internationally recognized 16-hour CE program created by the National Association of Emergency Medical Technicians (NAEMT) in conjunction with the Committee on Trauma of the American College of Surgeons. PHTLS offers two options to take the course (a 2-day in- person, or a one day hybrid (online didactic and in-person simulation). Both improve trauma care by focusing education on critical thinking and provides opportunity for skills training. The course includes topics such as scene/patient assessment, shock, airway management, emergency management, education on special populations, and traumatic injuries. Each EMS agency will have the opportunity to send one representative to become a PHTLS instructor.

**Dynamic Airway Labs (Advanced Airway Class)**

Dynamic Airway Labs has developed a 4-hour advanced airway course designed specifically for pre-hospital providers. The course includes both a didactic and simulation component. During the didactic session, attendees will review critical airway management, pitfalls, and proper technique. Once in the simulation session, attendees will use three-dimensional printed tracheas, simulation skin, and human interactions to practice basic airway management (e.g. bag-valve-mask ventilation and oxygenation with cadaver lungs) and advanced airway management (e.g. using a vomit simulator and cricothyrotomy training device).

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<b>10. Measurable Outcomes:</b> Outcomes should be viewed from the perspective of the project and provide for: improved conditions/service - for patients as well as EMS personnel; expanded services; new knowledge; or improved knowledge. <b>Outcomes must be measurable and attainable. (Attach additional pages, as needed.)</b>	
<b>A. Project</b>	<ul style="list-style-type: none"> <li>• Create up to 3 PHTLS training centers (south, central, and north)</li> <li>• Train 19 PHTLS instructors (one from each EMS agency)</li> <li>• Purchase required training materials to host PHTLS and Advanced Airway Class (e.g. classroom set of PHTLS books and advanced/difficult airway heads)</li> <li>• Offer PHTLS and advanced airway classes to pre-hospital providers</li> </ul>
<b>B. Activities</b>	<ul style="list-style-type: none"> <li>• Deliver at least 2 PHTLS courses for Broward pre-hospital providers</li> <li>• Deliver at least 2 advanced airway management courses for Broward pre-hospital providers</li> </ul>
<b>C. Outcomes</b>	<ul style="list-style-type: none"> <li>• 19 number of PHTLS instructors trained to teach PHTLS to pre-hospital providers</li> <li>• 24 PHTLS books purchased</li> <li>• 3 airway heads purchased</li> <li>• 2 PHTLS courses to educate and train Broward pre-hospital providers</li> <li>• 2 advanced airway management courses to educate and train Broward pre-hospital providers</li> </ul>
<b>D. Indicators</b>	Increased access to affordable, relevant EMS education and training
<b>E. Data Source</b>	<p>Arnold, J. J., Johnson, L. M., Tucker, S. J., Chesak, S. S., &amp; Dierkhising, R. A. (2013). Comparison of three simulation-based teaching methodologies for emergency response. <i>Clinical simulation in nursing</i>, 9(3), e85-e93.</p> <p>De Lorenzo, R. A., &amp; Abbott, C. A. (2007). Effect of a focused and directed continuing education program on prehospital skill maintenance in key resuscitation areas. <i>The Journal of emergency medicine</i>, 33(3), 293-297.</p> <p>de Schoutheete, J. C., Idrissi, S. H., &amp; Watelet, J. B. (2016). Pre-hospital interventions: introduction to life support systems. <i>B-ENT</i>, 12(26/1), 41-54.</p> <p>Lalman, N. S., &amp; Wooley, K. (1980). Knowledge and skill retention of emergency care attendants, EMT-As, and EMT-Ps. <i>Annals of emergency medicine</i>, 9(4), 183-189.</p> <p>Meizoso, J. P., Valle, E. J., Allen, C. J., Ray, J. J., Jouria, J. M., Teisch, L. F., ... &amp; Proctor, K. G. (2015). Decreased mortality after prehospital interventions in severely injured trauma patients. <i>Journal of Trauma and Acute Care Surgery</i>, 79(2), 227-231.</p> <p>National Registry of Emergency Medical Technicians. Emergency Medical Technician Recertification Information. Retrieved from <a href="https://www.nremt.org/nwd/public/document/emt-recert">https://www.nremt.org/nwd/public/document/emt-recert</a>. Accessed on August 27, 2019.</p> <p>Smith, R. M., &amp; Conn, A. K. (2009). Prehospital care- Scoop and run or stay and play?. <i>Injury</i>, 40, S23-S26.</p>
<b>F. Data Collection Method</b>	Sign in sheets collected in every training to track number of courses delivered and participants trained from each EMS agency.

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**11. Project Schedule:** Please complete the table below. Insert additional rows if needed.

Months after Grant is Executed	Activity
0-2 months	Order Materials and Equipment
1-4 months	PHTLS Instructor Training, and Schedule Courses (PHTLS and Advanced Airway)
4-6 months	Facility Monitoring for PHTLS
6-12 months	Deliver PHTLS and Advanced Airway Courses to EMS

**12. Supporting Research or Literature?**  Yes (Attachment A)  No  
 (Required if this is a Pilot Project.)

**13. Letters of Support or Reference?**  Yes (Attachment B)  No

**14. Budget:** Do not use brand names when listing items. Use only generic names. Round up/down to the nearest dollar. Please use the table below. Insert additional rows if needed. Do not include extended warranties.

Item	Unit Cost	Quantity	Total
see budget attachment			
Delivery charges, if any			
<b>Total</b>			<b>\$</b>

**15. Future Expenses:** Estimate the maintenance or other required recurring expenses per unit after the first grant year (if applicable). Note: No funding will be provided for these expenses under this grant program and must be absorbed by the grant recipient(s). Discuss this issue with your agency as it may affect its budget.

Items	Cost
none	


**Grant monies cannot be used to replace existing equipment.**

Initials of authorized signatory acknowledging the individual understands this statement.

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**16. Medical Director Approval:** For all projects requiring approval from the agency's Medical Director in accordance with Chapter 401, Florida Statutes, or Chapter 64J-1, Florida Administrative Code.

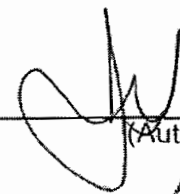
The undersigned, as Medical Director for this agency, supports and approves this project.

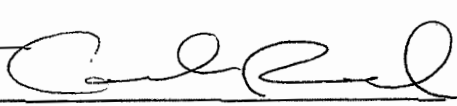
Signature:   
Printed Name: Dr. Randy Katz

Date: 09/23/19

**17. Partial Funding:** Will the agency accept partial funding?  
(Note: If the agency is awarded partial funding, an amendment to the outcomes and budget forms must be submitted).

- Yes, the agency will accept partial funding  
 No, the agency will not accept partial funding

Signature:   
(Authorized Signatory)  
Printed Name: Analdy Garcia

AGENCY NAME: Hollywood Fire Rescue  
AUTHORIZED SIGNATORY: Chief Analdy Garcia  
DATE: 09/23/19  
PRINT AUTHORIZED SIGNATORY NAME: Analdy Garcia  
TITLE: Deputy Chief  
PROJECT MANAGER'S SIGNATURE:   
PRINT PROJECT MANAGER'S NAME: Candace Pineda  
TITLE: Trauma Admin Director  
TELEPHONE: 954-265-4026  
EMAIL: canpineda@mhs.net

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**If this is a Single Agency Project, this is the last page of the application.**

**If this is a Multiple Agency/Countywide Project (excluding Countywide training projects), please continue by completing the Participating Agency Summary Sheet (Form A) and Section II for each Participating Agency.**

**Grant Application Submission Deadline:**

**TBD**

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**Form A**

**Participating Agency Summary Sheet**  
**(Attach a copy of negative responses)**

<b>Agency Name</b>	<b>Not Interested</b>	<b>No Response</b>	<b>Quantity Requested</b>
Coral Springs Fire Department	<input type="checkbox"/>	<input type="checkbox"/>	
Davie Fire Rescue	<input type="checkbox"/>	<input type="checkbox"/>	
Ft. Lauderdale Fire Rescue	<input type="checkbox"/>	<input type="checkbox"/>	
Hallandale Beach Fire Rescue	<input type="checkbox"/>	<input type="checkbox"/>	
Hollywood Fire Rescue	<input type="checkbox"/>	<input type="checkbox"/>	
Lauderhill Fire Rescue	<input type="checkbox"/>	<input type="checkbox"/>	
Lighthouse Point Fire Department	<input type="checkbox"/>	<input type="checkbox"/>	
Margate/Coconut Creek Fire Rescue	<input type="checkbox"/>	<input type="checkbox"/>	
Miramar Fire Rescue	<input type="checkbox"/>	<input type="checkbox"/>	
North Lauderdale Fire Rescue	<input type="checkbox"/>	<input type="checkbox"/>	
Oakland Park Fire Rescue	<input type="checkbox"/>	<input type="checkbox"/>	
Pembroke Pines Fire Rescue	<input type="checkbox"/>	<input type="checkbox"/>	
Plantation Fire Rescue	<input type="checkbox"/>	<input type="checkbox"/>	
Pompano Beach Fire Rescue	<input type="checkbox"/>	<input type="checkbox"/>	
Seminole Tribe of Florida, EMS	<input type="checkbox"/>	<input type="checkbox"/>	
Broward County Sheriff EMS	<input type="checkbox"/>	<input type="checkbox"/>	
Southwest Ranches EMS	<input type="checkbox"/>	<input type="checkbox"/>	
Sunrise Fire Rescue	<input type="checkbox"/>	<input type="checkbox"/>	
Tamarac Fire Rescue	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	



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**SECTION II**  
**(Complete for ALL "Multiple Agencies" or "Countywide" Projects,**  
**EXCLUDING Countywide Training Projects)**

**Does your agency desire to participate in the grant project?**

If No, ignore the remaining questions and return the form to the Project Manager (GRANTEE).

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**Initials of authorized signatory for Participating Agency**

If Yes, complete remaining items and return to:

Project Manager (name) Candace Pineda canpineda@mhs.net

The undersigned Participating Agency \_\_\_\_\_  
(Agency name)

agrees to enter into an ADDENDUM TO BROWARD COUNTY EMS GRANT FUNDING AGREEMENT and acknowledges that it has joined in with the  
Hollywood Fire Rescue (GRANTEE) on a Project Application for

(Project Title and Summary) Pre-Hospital Training and Education: to provide Broward EMS agencies opportunity to participate in PHTLS and Advanced Airway trainings

\_\_\_\_\_

as part of the BROWARD COUNTY EMS GRANT FUNDING. The Participating Agency acknowledges that, to be included as a Participating Agency under the agreement between BROWARD COUNTY and GRANTEE for BROWARD COUNTY EMS GRANT FUNDING ("Agreement"), it will be required to agree to the terms and conditions for the funding.

**1. Medical Director Approval:**

For projects requiring approval from the agency's Medical Director in accordance with Chapter 401, Florida Statutes, or Chapter 64J-1, Florida Administrative Code, the agency's Medical Director must complete the following:

**As Medical Director for above Participating Agency, I support and approve this project.**

**AUTHORIZED SIGNATURE:** \_\_\_\_\_

**PRINT NAME:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

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**2. Recurring Expenses after the grant year:**

The estimate for maintenance or other required expenses per unit after the first grant year, if applicable, are listed below. These costs will be absorbed by the grant recipient(s) (including each Participating Agency) and not paid from grant funds.

Item N/A Cost \$ \_\_\_\_\_

\_\_\_\_\_ Initials of authorized signatory for \_\_\_\_\_  
(Participating Agency)

**3. State the number of items requested or Training Participants.** \_\_\_\_\_

**4. PARTICIPATING AGENCY AUTHORIZED SIGNATORY:**

\_\_\_\_\_  
**DATE:**

**PRINT NAME:** \_\_\_\_\_

**TITLE:** \_\_\_\_\_

**5. PARTICIPATING AGENCY PROJECT LEADER SIGNATURE:**

\_\_\_\_\_  
**DATE:**

**PRINT NAME:** \_\_\_\_\_

**PARTICIPATING AGENCY PROJECT LEADER TITLE:**

\_\_\_\_\_

**EMAIL:** \_\_\_\_\_

**6. PROJECT MANAGER (GRANTEE'S RESPONSIBLE AGENT) SIGNATURE:**

\_\_\_\_\_  
**DATE:**

**PRINT NAME:** \_\_\_\_\_

**PROJECT MANAGER TITLE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_ **TELEPHONE:** \_\_\_\_\_

**EMAIL:** \_\_\_\_\_