



Orange County EMS Council

EMS AWARDS PROGRAM

APPLICATION

YEAR 2017 - 2018

EMS AWARDS APPLICATION

(FOR OFFICE USE ONLY)
EMSO ID. Code

Total Award Amount

1.	Organization Name	City of Orlando Fire Department
	Authorized Official	Buddy Dyer
	Title	Mayor
	Mailing Address	400 S. Orange Ave.
	City	Orlando
	State	Florida
	Zip	32801
	Telephone	407-246-2221
	Email Address	buddy.dyer@cityoforlando.net
2.	Contact Person	April Taylor
	Title	Planning and Grants Manager
	Mailing Address	110 George DeSalvia Wy
	City	Orlando
	State	Florida
	Zip	32803
	Telephone	321-235-5439
	Email Address	april.taylor@cityoforlando.net

3. **Legal Status of EMS Organization** (Check only one response).

- ☐ Private Not For-Profit (attach copy of IRS's 501(c)(3) letter or other legal documentation of this status)
- ☐ Private For-Profit ☒ City/Municipality
- ☐ County ☐ State

4. **Federal Tax ID No.** VF 5 9 6 0 0 0 3 9 6

5. **Medical Director**

I hereby affirm my authority and responsibility for the use of all medical equipment and continuing education awards projects.

SIGNATURE
Christian C. Zuver

PRINTED NAME

DATE
ME97144

MEDICAL LICENSE NO.

PROJECT DESCRIPTION AND JUSTIFICATION

A 12 POINT FONT MUST BE USED OR LEGIBLE HAND PRINTING

6. **Project Description/Justification:** This is the NEED STATEMENT. Describe and justify the project. Include: (1) all available numerical data, time frames for the data, data source; (2) number of people directly impacted by the award(s); (3) whether the project will serve single municipality, county, multi-county, or regional area; and, (4) whether the project will coordinate with other EMS organizations. (Use only the space provided).

The Orlando Fire Department (OFD) is seeking financial support for the purchase of three (3) additional automatic chest compression devices. The acquisition of the devices will continue to improve the department's Return of Spontaneous Circulation (ROSC) performance and provide additional safety measures for the responders during resuscitation events. The Emergency Medical Services (EMS) Division has carefully evaluated the efficiency and workflow of the system with emphasis on crew safety, patient care and customer service. According to the Orlando Fire Department EMS Reporting System (ESO), from January 1, 2016 to December 31, 2016, OFD responded to 320 cardiac arrest calls. Units performed CPR on 195 of those calls and were able to achieve ROSC on 47 of those patients. This is a success rate of 23%.

On July 1, 2017, the Orlando Fire Department deployed mechanical chest compression devices (*AutoPulseTM*) on 11 advanced life support (ALS) units. Between July 1, 2017 and September 1, 2017, the Orlando Fire Department responded to 59 cardiac arrest calls. Units performed CPR on 39 of those calls and were able to achieve ROSC on 15 of those patients. The introduction of the *AutoPulseTM* have not only improved the care provided to patients, safety of our personnel, but most importantly the ROSC (pulses on arrival to the emergency department) rate to 38%.

The approval of this grant request will ensure the Orlando Fire Department is able to equip three (3) additional ALS units with the *Auto Pulse* mechanical chest compression devices. The procurement of these devices is based on our commitment in continuing to improve OFD's ROSC rate, crew safety and provide patients the best chance of hospital admission and ultimately discharge. The addition of these devices will increase the efficiency and effectiveness of the CPR efforts performed. The EMS Division will be responsible for the deployment of the devices in an appropriate storage location on the identified ALS units. EMS Quality Improvement Officers will continue to review all cardiac arrest calls. Cardiac arrest calls are reviewed using Physio Control Code StatTM. The software supports the division's continuous improvement process to provide outcomes based on the expanded implementation of the devices.

The implementation of the devices will integrate in the efforts of cardiac arrest within the City and County areas based on joint-response agreements. Other agencies within the system are also using chest compression devices. The number potential citizens that will be impacted is estimated at approximately 30 cardiac arrests per month based on historical analysis of OFD call volume.

7. **Orange County EMS Strategic Plan:** If applicable, specifically reference Orange County EMS Strategic Plan goal(s) and explain relationship to the project.

OFD strives to meet the Orange County EMS strategic plan goals in all its projects, and to provide the best evidence-based emergency medical treatment offered to date. The QI staff will continue to analyze data which will be used to make any recommendations to improve patient outcomes and ROSC. Doing so we hope to provide further evidence that compression devices do increase a positive outcome for patients (ROSC) when utilized. Established safety metrics will improve firefighter safety and decrease injuries due to patient movement from upper floors and confined areas. With this assistance, OFD will be able to provide three (3) additional units with compression devices to further increase its overall ROSC rate and integrate with the rest of the healthcare delivery system in both technological and capacities. The projected increase in ROSC will show that the Orange County EMS system and the Orlando Fire Department are national leaders in pre-hospital care.

8. **Outcome measurability:** Degree to which the need will be met or changed (Use only the space provided).

The Orlando Fire Department's goal is to ensure the safety of all personnel and providing the best medical treatment to the citizens and visitors of the City of Orlando. Last year (2016) alone there were over 320 instances when a mechanical chest compression device could have been utilized. With the implementation of the eleven (11) devices on July 1, 2017 OFD had an increased ROSC rate of 15%. With the implementation of these three (3) additional devices, OFD is hoping to increase the ROSC rate even more. The QI staff will continue to review all cardiac arrest calls to show the positive outcome of these additional devices. The reduction in prevention of potential career ending injuries to personnel during the high-risk periods of moving patient from impeded spaces, low grade, or elevated areas will be assessed.
Goal: After 12 months OFD will demonstrate an improvement in ROSC (40%).

9. **Work activities and time frames:** Indicate procedure for delivery of project (Use only the space provided).

OFD will deploy the devices immediately upon the procurement. The devices will be strategically placed based on data showing the area/locations with the highest cardiac incident. The EMS Division will quantify the data from these additional units alongside the currently assigned units to capture outcomes of patients encountered. Our Health & Safety Division can also establish a time frame to quantify the data on injuries occurred personnel prior to the implementation of the devices of cardiac arrest patients, and compare that to injuries post implementation of the compression devices. It is anticipated that the data collected demonstrate an increased ROSC "high quality" and CPR when transferring or transporting cardiac arrest patients. The reduction in prevention of potential career ending injuries to personnel during the high-risk periods of moving patient from cramped spaces, low grade, or elevated areas will be assessed.

BUDGET

CATEGORIES	TOTAL
Expenditures: e.g., installation, shipping, etc. Shipping cost are absorbed by the company with this project. There are no installation cost associated with this project.	\$0
TOTAL EXPENDITURES	\$0.00
Equipment:	\$
Three (3) AutoPulse™ System with Pass - Generates consistent and uninterrupted chest compressions, offering improved blood flow during cardiac arrest. Includes Backboard, User Guide, Quick Reference Guide, Shoulder Restraints, Backboard Cable Ties, Head Immobilizer, Grip Strips, In-service Training DVD, and one year warranty	\$29,686.50
Three (3) AutoPulse Quick Case Blue, all in one carrying case and patient moving sheet for the Auto pulse system	No charge
Three (3) AutoPulse SurePower Charger U.S.	No charge
Nine (9) AutoPulse™ Li-Ion Batteries	\$6,682.50
Six (6) LifeBand™ 3 pack - Single-use chest compression bands. (3 per package)	\$2,025.00
TOTAL EQUIPMENT COSTS	\$38,394.00
GRAND TOTAL	\$38,394.00

ASSURANCES

ACCEPTANCE OF TERMS AND CONDITIONS: The recipient accepts the award terms and conditions in the "Orange County EMS Awards Program Application Manual", and acknowledges this when funds are expended from the award payment system.

EXECUTION OF EMS AGREEMENT: The recipient agrees to abide by the Agreement with Orange County EMS Office of the Medical Director.

DISCLAIMER: The recipient certifies that the facts and information contained in this application and any attached documents are true and correct. A violation of this requirement may result in revocation of the award.

SIGNATURE OF AUTHORIZED OFFICIAL *(Individual Identified in Item 1)*

DATE

TITLE

APPENDIX A

**MEDICAL DIRECTOR APPROVAL
OF
MEDICAL DEVICE**

**THE FOLLOWING MEDICAL DEVICE HAS BEEN EVALUATED AND APPROVED FOR USE IN THE ORANGE COUNTY EMS
SYSTEM UNDER MY DIRECTION:**

DEVICE _____

**CHRISTOPHER HUNTER, MD.,
ORANGE COUNTY MEDICAL DIRECTOR**

PH.D. DATE

APPENDIX B

RADIO EQUIPMENT WORKSHEET

EMS Radio equipment	Unit Cost	Quantity	Subtotal
<i>I. Mobile Radios</i> ^{1 2:}			
A. VHF High Band (or Low Band)			
B. UHF ³			
C. 800 MHz			
D. Ancillary equipment			
<i>II. Portable Radios:</i>			
A. VHF High Band (or Low Band)			
B. UHF			
C. 800 MHz			
D. Accessories:			
Charger (single or multiple)			
Remote microphone (speaker/microphone/antenna)			
Additional battery (two per portable radio)			
Carrying case			
E. Ancillary equipment			
<i>III. Base Stations:</i>			
A. VHF High Band (or Low Band)			
B. UHF			
C. 800 MHz			
D. Duplexers and/or Filters (as required)			
E. Ancillary equipment			
<i>IV. Communications Center:</i>			
A. Dispatch Consoles			
B. Recorders (logging and/or instant recall)			
C. Computer Aided Dispatch (CAD) system			
D. Automatic Vehicle Location (AVL)			
E. RF Control Stations (FX1)			
F. Ancillary equipment			
<i>V. Pagers:</i>			
A. Encoders			
B. Ancillary equipment			
Equipment Subtotal	\$		\$
<i>VI. Miscellaneous</i> <i>[Award Evaluation: 10% of Equipment Total]</i>			
Equipment Subtotal	\$		\$
<i>VII. Installation, Optimization and First Year Warranty</i> <i>[Award Evaluation: 15% of Equipment Total]</i>			
<i>VIII. Design and/or Engineering Fees</i>			
Bottom Line Total	\$		\$

¹ Pricing should include antennas and associated hardware.

² Dual Control Head required if radio is utilized for Local Medical Coordination.

³ Required in all licensed EMS vehicles (MED-8).

APPENDIX C

Application Scoring Sheet

Agency EMS Office of the Medical Director

Application No. 2

Evaluator _____

Date _____

Please answer the screening questions first.

Screening Questions (If a proposal receives a "YES" it is disqualified).

- A. Is the proposal cost prohibitive? Yes No
- B. Is the proposal unreasonable? Yes No
- C. Is the proposal potentially illegal? Yes No
- D. Failed to submit Appendix E and Appendix F for award(s) approved the previous year? Yes No

Score each remaining application based on the following criteria:

- Each application should be scored on its own merits and not compared to another application or other criteria. If there are issues related to the proposal note these in the comments.
- The score for each element can be between the score levels. For example, for *Overall Merit* the score can be 8. This is higher than "good" but not "excellent".
- Total the points and record the score at the bottom of the form and on the accompanying composite sheet.

1. Overall merit of the application

- 10 - Excellent proposal
5 - Good proposal
1 - Fair proposal
0 - No merit

2. Meeting goal or objective of the Current EMS Strategic Plan

- 10 - Completely meets
5 - Partially meets
1 - Minimal meets
0 - Doesn't meet

3. Value or benefit to the Countywide EMS system

- 6 - Excellent benefit
3 - Good benefit
1 - Fair benefit
0 - No benefit

1. Cost

- 3 - Low cost < 1,500
2 - Medium cost < 34,000
1 - High cost > 34,000

5. Ease of implementation

- 3 - Easy to implement
2 - Moderately easy to implement
1 - Hard to implement

TOTAL SCORE _____

APPENDIX F

Project Outcome Report

To remain eligible for award funds, Appendix F must be completed and submitted to the Office of the EMS Medical Director before the end of the current award cycle.

PROJECT OUTCOME: The measurable degree to which the project needs have been met.

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SUBMITTED BY:		⇒	
			SIGNATURE

DATE: _____