

NATIONAL 911 PROGRAM September 10, 2019



# State of 911 Webinar Series

- Designed to provide useful information about Federal and State participation in the planning, design, and implementation of Next Generation 911 (NG911) coupled with real experiences from leaders overseeing these transitions throughout the country
- Webinars are typically held every other month and include presentations from a Federal-level 911 stakeholder and State-level 911 stakeholder, each followed by a 10-minute Q&A period
- For more information on future webinars, to access archived recordings and to learn more about the National 911 Program, please visit <u>911.gov</u>
- Feedback or questions can be sent to: <u>National911Team@mcp911.com</u>



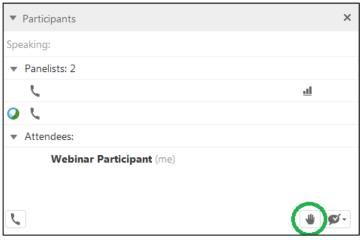
## Questions?

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# CPRLifeLinks

911 and EMS united to save more lives.

The CPR LifeLinks Implementation Toolkit

# **SPEAKERS**

- Jim Lanier, ENP, Technical Services Division Manager, Alachua County Sheriff's Office
- Julie Buckingham, Resuscitation Academy Program Manager, American Heart Association

### **CPR LIFELINKS**

A national initiative to unite EMS and 9-1-1 agencies to improve survival rates in their communities by implementing Telecommunicator CPR and High Performance CPR

### EARLY INTERVENTION SAVES LIVES

- Out-of-hospital cardiac arrest (OHCA) is the severe malfunction or cessation of the electrical and mechanical activity of the heart
- 250,000 estimated OHCAs in the U.S. every year
- Likelihood of patient survival decreases 7-10% per minute without CPR
  - The average national survival rate hovers around **10%** and increases to **30%** in cases when first responders find patient in ventricular fibrillation (VF), the shockable rhythm usually associated with arrest onset

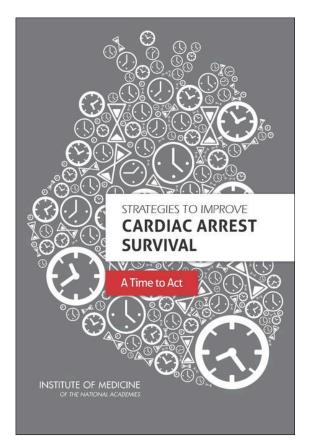
### "Benchmark communities and healthcare systems demonstrate that the ability to save more lives is possible."

National Academy of Medicine

### INCREASING OHCA SURVIVAL

2015 Institute of Medicine (IOM): EMS systems should take steps to enhance T-CPR and HP-CPR to improve patient outcomes in their communities.

In response to the report, the National Highway Traffic Safety Administration (NHTSA) convened experts and created **CPRLifeLinks.** 





### IMPLEMENTATION TOOLKIT

Complete package of cognitive and hands-on training and assessment tools with audiovisual demonstrations and case studies. The **CPR LifeLinks Implementation Toolkit** is a how-to guide for EMS and 911 agencies interested in implementing programs to improve cardiac arrest survival rates in communities across the nation.

#### A practical roadmap to help:

- 9-1-1 agencies implement Telecommunicator-CPR protocols, training and QI
- EMS agencies implement High-Performance CPR programs

### DEVELOPING THE CPR LIFELINKS TOOLKIT

The NHTSA Office of EMS and National 911 Program convened a group of 20 public safety leaders to draft the CPRLifeLinks Implementation Toolkit.

#### 16-Month Development Process

- Monthly meetings
- One in-person meeting
- Multiple Toolkit revisions
- Public comment solicitation



CPR LifeLinks is a national initiative that encourages local collaboration between 9-1-1 and EMS to improve out-of-hospital cardiac arrest survival rates by improving care in the first links in the "Chain of Survival": early 9-1-1 access/intervention and early (and effective) CPR.

The CPR LifeLinks Implementation Toolkit Find resources and a practical roadmap for how:

Any 9-1-1 agency can put telecommunicator CPR protocols and training into place
 Agencies providing EMS can implement High-Performance CPR.
 Learn strategies and explore case studies for how 9-1-1 and EMS can collaborate, working togethic to strengthem High Chain of Stanisti.

### T-CPR WORKING COMMITTEE

Julie Buckingham

Resuscitation Academy Program Manager

- Mickey Eisenberg MD, MPH, PhD
   Director of Medical QI
- Chris Fischer

Public Safety Communication Consultant

• Jim Lanier, ENP

Technical Services Division Manager

Helge Myklebust

Director of Strategic Research

Jason Oko, NR - Paramedic
 Licensing Agent & EMD Program Coordinator

- Brett Patterson Academies & Standards Associate Chair
- Jamison Peevyhouse, ENP
   Training Coordinator
- Thomas Rea, MD, MPH
   Medical Program Director
- Kevin Seaman, MD Medical Director
- Bob Swor, DO
   EMS Medical Director
- Jerry Turk President

#### TELECOMMUNICATOR CPR

#### TRAINING/PROTOCOL/CQI

#### Examples of Telecommunicator-Assisted CPR Performance Metrics:

- Percentage of cardiac arrests recognized when dispatchers have a chance to assess patient consciousness and breathing
- Time from call receipt to recognition of cardiac arrest
- Percentage of cases that receive chest compressions when dispatchers have a chance to assess patient status and CPR is not already in progress
- Time from call receipt to first chest compressions High-Performance CPR programs

### WHAT'S INSIDE:

#### **Two "Linked" Training Chapters**

#### PART 1: Telecommunicator CPR (T-CPR)

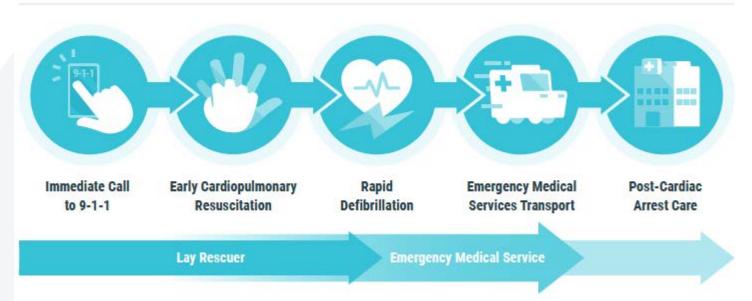
- Section 1: Overview
- Section 2: The Commitment to Act: Challenges and Perspectives
- Section 3: AHA T-CPR Program and Performance Recommendations
- Section 4: Protocols
- Section 5: Telecommunicator Training
- Section 6: Achieving a T-CPR Culture of Excellence

#### PART 2: High-Performance CPR (HP-CPR)

- Section 1: Overview
- Section 2: The Commitment to Act: Challenges and Perspectives
- Section 3: Performance Recommendations
- Section 4: Common CPR Quality Issues
- Section 5: Training
- Section 6: Achieving a HP-CPR Culture of Excellence

### CHAIN OF SURVIVAL

### Chain of Survival



The Chain of Survival is an integrated system of OHCA care

<u>Culture of Excellence</u>: An environment which requires a shared organizational vision by both 911 and EMS leaders

Leadership: Need to identify and empower EMS/911 leaders

#### Achieving a Culture of Excellence

- Build bridges between stakeholders across the Chain of Survival
- Recommend elements of PSAP/EMS CQI/QA
- Fulfilling additional steps PSAPs/EMS agencies can take toward a culture of excellence

### TELECOMMUNICATOR CPR DEFINED

# A THREE-STEP PROCESS WHERE TELECOMMUNICATORS:

- Work together with 9-1-1 callers to identify potential OHCA patients
- 2. Provide callers with pre-arrival CPR instructions
- 3. Coach callers to perform continuous CPR until EMS assumes care

#### 2017 American Heart Association Recommendations

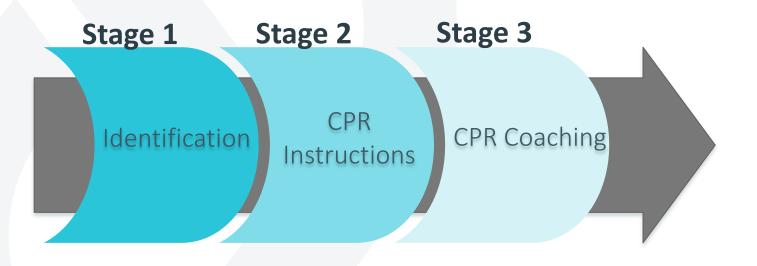
- Percentage of total OHCA Cases Correctly Identified by Telecommunicators
- Percentage of Recognizable OHCA Cases Correctly Identified by Telecommunicators
- Percentage of Telecommunicator-Recognized OHCA Receiving T-CPR
- Median Time Interval Between 9-1-1 Call and OHCA Recommendation
- Median Time Interval Between 9-1-1 Call and First Telecommunicator-Directed Compression

### **OPRLifeLinks**

### T-CPR: CHALLENGES, PERSPECTIVES & SOLUTIONS

Challenge	Solution
Challenge #1: Staffing	OHCA calls represent only 1-2 percent of all 9-1-1 calls making a small impact on operations
<i>Challenge #2:</i> Lack of Medical Direction	9-1-1 collaboration with local EMS agencies may provide a useful model to consider
Challenge #3: Perceived Liability Concerns	Protection laws already exist
Challenge #4: Budget Constraints	9-1-1 surcharge funds can be used to cover expenses
Challenge #5: Perceived Scope of Practice	CPR is generally considered first aid
Challenge #6: Data Sharing	HIPAA does not prevent hospitals from sharing patient outcomes with 9-1-1 and EMS

### **PROTOCOLS: T-CPR INSTRUCTIONS**



### **T-CPR TRAINING**

#### Circle of Telecommunicator-CPR



Segment One: Know the Recommendations



Segment Two: Practice CPR Skills



Segment Three: Master Three Stages of T-CPR

Segment Four: Simulate T-CPR



Segment Five: Measure & Improve





#### COMMON CPR QUALITY ISSUES Four Common Challenges

#### Recognition of CPR quality issues and causes is an essential step toward improving performance.

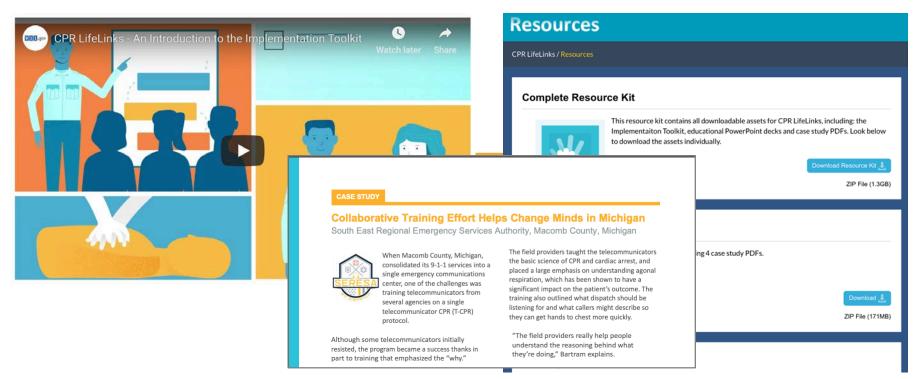
Avoiding delays, pauses and interruptions in CPR

Managing the effects of airway and ventilation techniques Optimizing compressions technique

Managing chaos



### MATERIALS FOR YOU AND YOUR AGENCY



https://www.ems.gov/projects/cpr-lifelinks.html

https://www.911.gov/project\_cprlifelinks/index.html



### WHAT YOU CAN DO

- **Build a relationship** between your 911 center and EMS agency start the CPR dialogue.
- Download the CPR LifeLinks Toolkit
- Share the word about CPRLifeLinks and the resources available. They can help any agency get started, regardless of size or location.

CPR LifeLinks – A True Story from Bend Oregon <u>https://www.youtube.com/watch?v=GNJ23GFatWE&t=53s</u>

# **Q&A** Period

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### SNATCHING LIFE FROM THE JAWS OF DEATH.



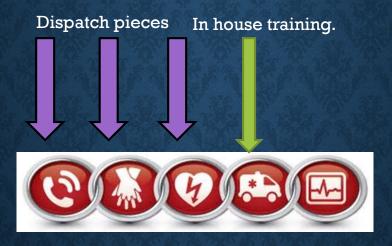


We would tear our department apart and rebuild it step by step, if we thought we were losing 4-6 citizens per year that should have been rescued from fires.

So when we know we can save 4 to 6 additional people every year from cardiac arrest– are we as an agency going to step up and put the same energy into saving these CPR patients?
To the family –dead is dead, and equally tragic, so why would we spend any less effort saving these patients?"

-Russ McCallion Assistant Chief East Pierce Fire and Rescue

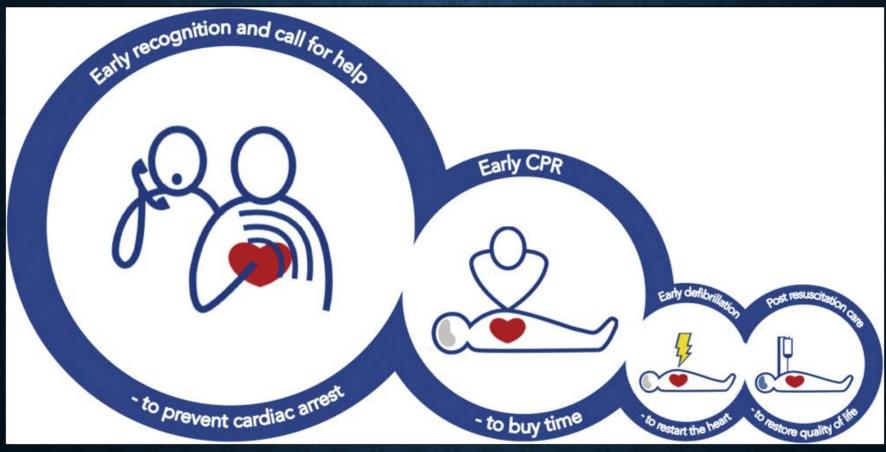
#### WHERE CAN I INFLUENCE CHANGE?





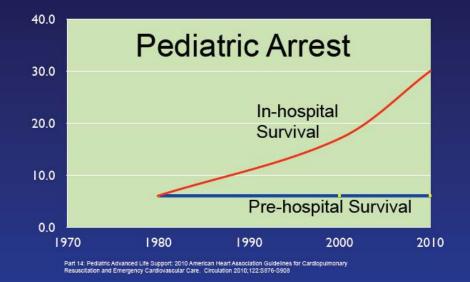
- DA-CPR doubles survival
- Slows the dying process
- Sooner it begins the better
- HP-CPR suspends the dying process
- Allows time for additional shocks and ALS to succeed





Deakin CD, Resuscitation 2018;126;80-82

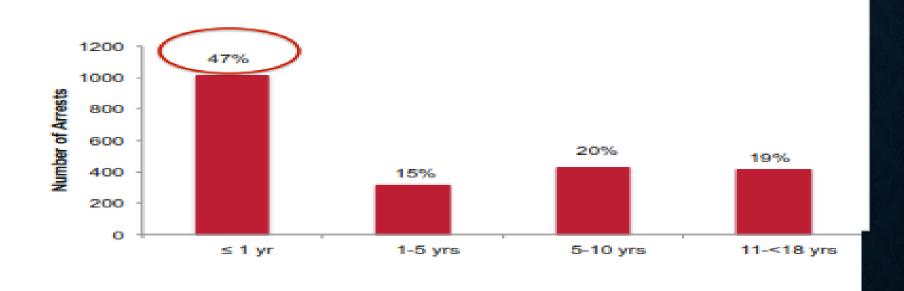
### Perspective



### PEDIATRIC ARREST

- 1 out of 3 children receive bystander CPR
- 6% survive hospital to discharge
- Most children die from neurological harm due to long down times

#### What Age Do Arrests Occur in?



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Characteristics and Impact of Bystander Cardiopulmonary Resuscitation Following Pediatric Out of Hospital Cardiac Arrest in the United States: A Study from the Cardiac Arrest Registry to Enhance Survival

#### PARADIGM SHIFT



- Identify challenges
  - It can't be a siloed system
- Establish a baseline
  - As an agency, we had to believe that people in cardiac arrest are savable





- Involve Stakeholders
- We changed the way we trained
- Timely and relevant feedback

### KNOW THE "WHY"



### CELEBRATE (YES, EVEN THE SMALL VICTORIES)!



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# **Future Webinars**

- Tuesday, November 12, 2019 at 12 noon ET
- To register, visit: <u>https://tinyurl.com/2019Stateof911Webinars</u>
- Previous State of 911 webinars are available at: <u>www.911.gov/webinars.html</u>



# National 911 Program

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