Telephone-CPR* Toolkit

*Synonymous names are Dispatcher-CPR, Dispatcher Assisted-CPR, Telecommunicator-CPR
Telephone-CPR PROGRAM TOOLKIT

This toolkit is free to emergency communications centers and EMS agencies interested in implementing a Telephone-CPR Program. The materials have been developed to provide step-by-step instructions for implementing a program and useful materials to assist you in that process. This and other toolkits may also be found at http://resuscitationacademy.org/.
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Overview

The Challenge

Out-of-hospital cardiac arrest claims hundreds of thousands of lives each year in the US and potentially millions worldwide. Survival relies on the chain of survival with early arrest identification and effective CPR serving as the foundation for successful resuscitation. Early bystander CPR can improve the chances of survival 2–3 fold and yet in many communities only 1 in 4 cardiac arrest victims receive bystander CPR.

A Solution

Emergency Medical Dispatch is a vital component of any Emergency Medical Services System. An emergency medical dispatch program should provide written, medically-approved guidelines that dispatchers use to effectively deliver pre-arrival emergency telephone instructions, including CPR instructions. **Telephone-CPR** is the process whereby an emergency telecommunicator (synonymous terms are emergency dispatcher and emergency call-receiver) helps the caller recognize the arrest and deliver lifesaving CPR.

The time interval from collapse to initiation of CPR is a critical factor in determining survival from out-of-hospital cardiac arrest. Telephone-CPR can help the bystander identify the arrest and begin CPR soon after someone calls 9-1-1. Typically an assertive and well-trained emergency telecommunicator can identify cardiac arrest within 1 minute and begin Telephone-CPR within 2 minutes of the call. In contrast, the interval from 911 call to EMS providers arriving at the patient is often 8 minutes or longer in many systems.

A committed Telephone-CPR program can effectively double the rate of community bystander CPR. The consequence is that Telephone-CPR saves lives — even in communities with high-performing EMS systems. This toolkit details a Telephone-CPR program. A special section at the end of this toolkit is dedicated to the issue of agonal breaths and their important role in identifying cardiac arrest.
Initial Steps: Achieving buy-in

Determine Key Players

Before embarking on a Telephone-CPR project, it is essential to establish support from Dispatch and EMS Leadership. Please consider Dispatch, EMS, and physician involvement when structuring or improving your Telephone-CPR program. Each EMS system is different and so may require distinct strategies for success.

Emergency Communications (Dispatch) Centers – Communication centers may provide service to police, fire / EMS, or a combination of these. The workload at combined police/fire/EMS centers may consist primarily of law enforcement calls. One needs to understand the workload priorities of a communications center. A medical program like Telephone-CPR can be a high-priority activity even in a center that predominantly fields police-related 9-1-1 calls. The fundamental perspective regardless of the characteristics of the communications center is that dispatcher involvement and performance truly make a life-and-death difference for cardiac arrest. The program can save lives in their community and is an exceptional opportunity to foster public relations.

Identify the individual or group at the communications center who can shepherd the activity to success. This entity may be the communications center director or administrator or the individual(s) responsible for training and quality improvement. Work to build consensus. Perseverance and “face-time” are important and can influence the commitment of communications center leadership, who will be key to achieving a successful Telephone-CPR program.
**Telephone-CPR**

**Field EMS** - Cardiac arrest survival is a universal benchmark of EMS performance. An integrated system that enhances dispatcher performance should be welcomed by EMS leadership. Increasing bystander CPR will help improve survival and represents an important community achievement that Fire Chiefs, EMS Administrators, and community leaders will generally welcome and support. These individuals and their agencies should be engaged whenever possible as part of a multidisciplinary “team” that will work to support the communication center initiative. This partnership often requires sharing expertise and information so that dispatch and EMS can make improvements. Often the partnership is well-established. If not, a program of Telephone-CPR is a well-suited opportunity to form this partnership.

**Medical Director and Hospitals** – Some states do not require medical directors to oversee emergency communications centers as part of their Regional Medical Director responsibilities. Nonetheless, EMS Medical Directors are well-positioned to support an effective Telephone-CPR program. The EMS Medical Director has a primary responsibility for EMS field care and often has a hospital role. Thus the Medical Director can follow resuscitation through “the system” and provide an important medical perspective in this critical health condition. A well-deserved acknowledgement of the important role of dispatch from the traditional physician and hospital personnel can be empowering and validate efforts to improve a program of Telephone-CPR.

**Community Citizens/Survivors** – In some cases, laypersons can be strong advocates for Telephone-CPR. Cardiac arrest survivors can serve as spokespersons and can motivate the stakeholder organizations. The survivors are the real “product” of a successful program and their stories are often very powerful.

**Fact Sheet/Frequently Asked Questions (FAQs)**

Included with this Telephone-CPR Toolkit is a Fact Sheet including Frequently Asked Questions and answers to these questions.
Letters of Support and Recognition

Letters of support from community members and influential leaders can go a long way in achieving buy-in. The following is a template designed for a community leader.

August 30, 2010
Attn:
Address
City, State, Zip

Dear (Communications Center Director):

Our emergency medical dispatchers are the lifeline for the thousands of callers who dial 911 for medical help each year. Providing critical Telephone-CPR instructions to potential rescuers makes the dispatchers a critical link in the pre-hospital EMS response in our community and provides patients and their families an opportunity for a positive outcome. The Telephone-CPR program is a standard of care in many counties in the United States and research demonstrates that the communities that adopt this program achieve better bystander CPR rates and cardiac arrest survival rates. I support the use of this program as well as the commitment of resources to bring this program to fruition in our community.

Sincerely,

Mayor Steve Davis

Position Statements/Press Releases from National Organizations

In addition to community leader support, numerous organizations have actively supported Telephone-CPR. The following websites and examples can also be used to gain support for Telephone-CPR in your community.


AHA Alert: “The Links in the Chain of Survival: Early Access/911 & Early CPR.”
http://americanheart.org/presenter.jhtml?identifier=3012016

Press Release - “Unified national effort needed to save lives by increasing use of CPR.”
http://www.newsroom.heart.org/index.php?s=43&item=346

Press Release - “Dispatcher-Assisted Bystander CPR Best Choice For Possible Cardiac Arrest Signs.”
http://www.newsroom.heart.org/index.php?s=43&item=912

AHA Advocate Guide
http://www.heart.org/idc/groups/heart-public/@wcm/@adv/documents/downloadable/ucm_301797.pdf
General Talking Points

Be prepared to make your case for the importance of Telephone-CPR. Know the facts and whenever possible place them in the context of your community.

- Cardiac arrest is a major killer in most communities. Each year in the United States hundreds of thousands of persons suffer out-of-hospital cardiac arrest.

- Early bystander CPR can improve the chances of survival 2 – 3 fold and yet is typically only provided in about a quarter of cases of cardiac arrest (incorporate your own community performance when known).

- There are a number of approaches to increase bystander CPR in the community, but one of the most effective and efficient is to implement/improve a program of Telephone-CPR. A committed program of Telephone-CPR can nearly double the bystander CPR rate and in turn save lives.

- The role of Emergency Dispatch should be obvious but review the integral role of dispatch depending on your audience. The dispatcher is the first link between the patient and definitive care. If dispatch is effective, they can be lifesaving. Conversely, poor dispatch performance may undermine the downstream efforts by EMS and hospital personnel. Despite the traditional perspective that field EMS, nursing, and physician care determine outcome, dispatch performance can be and often is the tipping point in a resuscitation.

- If there is interest and enthusiasm, consider the potential role for the dispatch center to also be involved in Public Access Defibrillation. Dispatch may be able to assist with AED instruction or help by alerting bystanders to proximal AEDs.

Important Points for the Communications Center

Dispatch workload - Research and estimate the average cardiac arrest call volume per agency. For example, King County (including city of Seattle) has approximately 1,000 cardiac arrests per year. This is roughly 20 per week. The area is served by 3 large police/fire/EMS communications centers. The average workload per center is approximately 7 cardiac arrests per week for this populated metropolitan area. The average may be far less in a rural setting. An appreciation of the caseload of cardiac arrest is an important and practical consideration.
Telephone-CPR

Training - Training may be in-classroom or online. Free on-line training is available from the Resuscitation Academy (resuscitationacademy.org). Initial T-CPR training 3-4 depending on the experience of the participants (See Training Section). Basic T-CPR training should be followed with yearly updates and continuing education.

Cost - Cost is a real-world consideration. Basic Training in Telephone-CPR options are outlined in the Training Section. Every organization is different and cost will depend upon staffing structures. In general, initial training requires 3-4 hours though refresher training and continuing education can be achieved in substantially less time. Training can be accomplished with face-to-face and online resources. Partnering with neighboring regions or agencies to deliver this training and decrease any costs associated with instructors or content development is a good option.

Some EMD programs charge for the use of their Telephone-CPR instructions. If you choose to use one of those, there could be substantial costs and contracts associated.

The costs connected with a quality improvement program will vary depending on the personnel that already exist that may be able to take on additional training and responsibilities. If an additional staff person must be added there would be a substantial associated cost.

Liability - 911 agencies across the nation provide Telephone-CPR instructions to citizens as part of a standard of pre-hospital care. These Emergency Medical Dispatch programs include pre-arrival emergency instructions for cardiac arrest. A Telephone-CPR program that actively evaluates their performance as part of quality assurance is best-positioned to deal with any issues of liability. The lack of such a program potentially invites liability in this life-or-death condition.

Responsibility - Dispatch is an integral part of the Chain of Survival. A Telephone-CPR program can save lives and improve public health. A successful program is an important community asset and should be a feature of the communication center. A successful Telephone-CPR program however takes hard work and persistent and consistent effort. Dispatch leadership ultimately is responsible for implementing and improving this program. Program “ownership” by the communications center will assure ongoing efforts to achieve a high standard of performance.
Selling points for dispatchers

Dispatchers will welcome this program as it gives them another tool to assist callers and patients. It is a stressful feeling for a call receiver to know that someone is in need of CPR. It is even worse when the dispatcher does not have the training and tools to expertly guide the caller to identify the arrest and provide CPR. The following is testimony from a veteran dispatcher regarding this subject:

Dear EMD Program Manager,

I was reflecting on my EMD award last night and wanted to share the following with you:

I started at dispatching in 1995 and as you know, things have changed a bit since then. I remember one call in particular that changed the way I looked at all medical calls and my role in them. Over time, the exact details about this call have faded, but the memories of how I felt that day remain.

About a year or so after I started, I received a call from a frantic parent whose child had collapsed. The child was not breathing and it was clear that without CPR, this child would not have a chance of surviving. The caller was begging us to help him save his child and asked us how to perform CPR. My dispatch partner Charlie and I felt helpless as we didn’t have any idea how to give CPR instructions over the phone. This child had a previous head injury, was wheelchair bound and due to the head injury, had his jaw wired shut. Charlie and I “winged it” and thinking about our own CPR training, gave the parent what we hoped were adequate instructions. I don’t remember if what we did helped the child survive, but I do remember how grateful the parent was that we were there helping him do “something” to increase those chances. We finally had the tools we needed to do our jobs to the best of our ability, and I still remember how scared Charlie and I felt not knowing if what we were doing was right.

When the EMD program was developed, I was thrilled. Finally we now had the tools we needed to help callers in the correct way before EMS arrived on scene. Things have changed quite a bit since Criteria Based Dispatching was introduced, as our previous way of determining paramedic criteria was deciding if this sounded like an "icky call". I don’t know if I have ever officially thanked our medical director for believing in the program and all the countless hours and hard work put in by so many in developing, maintaining and training us on that, I wanted to say thank you.

Sue
Telephone-CPR

Getting Started

Do your best to be informed so that the program can be successful. You may not have an answer to all the questions but consider:

*Does the center(s) provide service to police, fire, EMS, or a combination of agencies?*

*How many cardiac arrests do they handle each year? How many total calls do they handle?*

*Does the communications center use pre-arrival CPR instruction protocols? If so, which ones? Plan to review the content.*

*Does the center(s) have a records custodian or other personnel who can provide digital recordings of cardiac arrest 911 calls? What is the process for requesting recordings?*

*Does the center identify and pull cardiac arrest calls for dispatch review?*

As you work to move things forward, consider forming a “Dispatch Review Committee” to implement/monitor the Telephone-CPR program. Participants can include representatives from the communications center, EMS providers, the EMS Medical Director, and others involved in pre-hospital EMS care. Given its membership, the Committee can achieve consensus and make informed decisions. Typical responsibilities of a Dispatch Review Committee are sentinel case review, protocol review/revision, and approval of training materials. This multidisciplinary group is a great resource and provides effective communication.

As you assemble the persons and resources to improve the Telephone-CPR program, make sure you transcribe “next steps”. In other words, attach an action plan that will accomplish the concepts and plans discussed in meetings. Review the “next steps” periodically to assess progress.

**Sample Slide Presentation**

*(Telephone-CPR Briefing)*

The Toolkit includes a PowerPoint presentation that can be used to educate communication center administrators, EMS administrators, and other stakeholders regarding the value of a Telephone-CPR program. There are notes on each slide (in “Edit Slide” view) to further explain the text and provide guidance to the presenter. Modify them for success in your community.
Each communication center will have a distinct set of characteristics that will motivate participation and success. The following is a list of training options/elements/component that can be used to tailor a program that is right for your agency.

**Basic Training Program**

Depending on individual program design, the training required to enable dispatchers to provide emergency telephone-CPR instructions will vary. However, any training can include the following:

- Anatomy & physiology of the circulatory and cardiovascular system.
- Relationship between the circulatory, respiratory, and nervous systems.
- Signs and symptoms of ACS – acute coronary syndrome.
- Signs of life recognition.
- Early recognition of the need for CPR.
- Agonal respirations.
- Pathophysiology of sudden cardiac death/cardiac arrest.
- Explanation of Telephone-CPR and value of program.
- Practice in the use of the instructions.
- Physiology behind the performance of the instructions.
- AEDs and how they fit in the picture of resuscitation.
- Difference between instructions for children, infants, pregnant patients, obese patients, patients with a stoma.
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- Unusual circumstances posing challenges to delivering CPR instructions:
  - Patients with DNR orders
  - Patients on ventilators
  - Post-op patients
  - Difficult patient positioning; unable to move patient
  - Unable to follow parts of instructions
  - Obvious DOAs
  - Cardiac arrest from trauma
  - Electrocution
  - Drowning
  - Strangulation
  - Rescuer refusal
  - Two rescuers—ventilations

- Mechanism for practice.
- Practical and written evaluation (testing).

**Lesson Plans and PowerPoint Presentation**

Lesson plans, PowerPoint presentations, and audio examples relating to Telephone-CPR in the King County Emergency Medical Dispatch Basic Course are included in this Toolkit (click on each link to view):

3.1 Systems of Human Body [Lesson Plan] [Power Point]
4.2 All Callers Interview [Lesson Plan] [Power Point]
5.1 Medical Background/Anatomy (starts out with circulatory system...) [Lesson Plan] [Power Point]
5.2 Cardiac Arrest [Lesson Plan] [Power Point]
5.3 Unconscious/Unresponsive [Lesson Plan] [Power Point]
5.6 Choking [Lesson Plan] [Power Point]

**Digital Audio Examples**

**Continuing Education**

Part of any Telephone-CPR program should include the mechanism to deliver continuing medical education. The content of the education should include any changes in industry standards, emphasis on the time critical aspect of Telephone-CPR, any issues identified through quality improvement tasks and examples of survivals, as applicable.

King County EMS has a web-based Emergency Medical Dispatch CE program called EMS Online, including a module for Cardiac Arrest. This is available to all agencies for a nominal user fee. Additional modules that would be helpful include: Anatomy and Physiology, EMD Sick/Not Sick, Seizure/Altered level of consciousness, Respiratory Distress and Stroke. Each module takes 30 - 90 minutes (varies by skill level) and includes an exam. Dispatchers can take the course on duty and it does not have to be completed all in one sitting. The system allows training officers to monitor course completion by agency. Registration is $30 annually per dispatcher. See Brochure for additional information: EMS Online Brochure. For additional information contact Cleo Subido at 206-263-8636.
Sample Protocols

There are a variety of existing protocols for Telephone-CPR or you may choose to develop your own. Conceptually the most important feature of a Telephone-CPR algorithm is that it quickly helps to identify the cardiac arrest patient and to quickly begin chest compressions.

Cardiac Arrest Identification
Cardiac arrest victims are uniformly unconscious and have abnormal or no breathing. The abnormal breathing is termed “agonal” respirations. Agonal respirations are described in detail in the Appendix. The special respirations are a sign of cardiac arrest but can be confused for signs of life by potential rescuers and so may inhibit CPR initiation. The dispatcher can identify agonal breaths as abnormal and facilitate the onset of CPR. The 2 most important questions to identify cardiac arrest are:

1. Is the patient conscious?
2. Is the patient breathing normally?

If the answer to these 2 questions is “NO”, then the dispatcher should Go and tell the rescuer to start CPR if it is not already ongoing.

Thus the easy to remember phrase of NO, NO, GO!
Even if the patient has a masquerading condition such as hypoglycemic coma, post-ictal seizure state, or syncope, early bystander CPR will not cause harm. Of course for those with true cardiac arrest, this early CPR can be lifesaving.

Once the arrest is identified, the telecommunicator should engage and encourage the bystander so that CPR can begin. The dispatcher should work hard to empower the bystander. Simple instructions can enable the bystander to start quickly. Instructions that provide chest compressions but no ventilations are appropriate in most adult arrest. This approach is simple and enables CPR to start sooner than the traditional approach combining rescue breathing and chest compressions. (See the sample adult CPR instructions below.)

A word about CPR instruction protocols. There are several established protocols of CPR instruction. The fundamental approach is detailed above. Protocols that delay quick identification and simple CPR instructions only serve to cost lives. Please use a simple Telephone-CPR algorithm. Consider having the Dispatch Review Committee assess your protocol so that it can be streamlined. Sample protocols included with this toolkit include:

<table>
<thead>
<tr>
<th>Adult CPR</th>
<th>AED Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child CPR</td>
<td>Unconscious patient/ breathing normally – Airway Control</td>
</tr>
<tr>
<td>Infant CPR</td>
<td>Adult Choking</td>
</tr>
<tr>
<td>Neonate CPR</td>
<td>Child Choking</td>
</tr>
<tr>
<td>CPR for the Overweight Person</td>
<td>Infant Choking</td>
</tr>
<tr>
<td>CPR for Pregnant Women</td>
<td></td>
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<tr>
<td>CPR for Tracheostomy/Laryngectomy</td>
<td>(Link to Pre-Arrival Protocols)</td>
</tr>
</tbody>
</table>
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Sample Protocol

CPR/Adults

1. Is there an AED (Automatic External Defibrillator) on the premise?
2. Does anyone there know CPR? (Trained bystanders may still need instructions. Ask!)
3. Get the phone NEXT to the person.
4. Listen carefully. I'll tell you what to do.
   • Get them FLAT on their back on the floor.
   • BARE the chest.
   • KNEEL by their side.
   • Put the HEEL of your HAND on the CENTER of their CHEST, right BETWEEN the NIPPLES.
   • Put your OTHER HAND ON TOP of THAT hand.
   • PUSH DOWN FIRMLY, ONLY on the HEELS of your hands, 2 inches.
   • Do it 50 times, just like you're PUMPING the chest. Count OUTLOUD 1-2-3-4-5-6...50. ***(correct rate if needed)
   • KEEP DOING IT: KEEP PUMPING the CHEST UNTIL HELP TAKES OVER. I’ll stay on the line.

***If rescuer becomes too tired to continue instruct them to rest a short time then continue compressions as soon as possible.***

Ventilation instructions: (for use when suspected cardiac arrest secondary to respiratory arrest)
   • PINCH the NOSE with your other hand, LIFT the CHIN so the head BENDS BACK.
   • Completely COVER their MOUTH with your MOUTH.
   • GIVE TWO BREATHS OF AIR (come back to the phone)

***Then back to compression instructions (#4 above) but give 30 compressions between breaths.***

Foreign Body Airway Obstruction: (confirmed choking now unconscious)
   • After each set of 30 compressions “Look inside the mouth, remove any obvious obstruction”. If object is removed give two ventilations between each set of 30 compressions. If object not seen continue with compressions.

NOTE: IF CALLER REPORTS VOMITING, INSTRUCT CALLER TO:
   • Turn their head to one side.
   • Sweep out contents with your fingers before you resume.
Ongoing Monitoring

Telephone-CPR Quality Improvement (QI)

The fundamental strategy for an effective Telephone-CPR program is to “measure and improve”. This goal can be achieved through an efficient QI dispatch activity. The goals of this QI activity aim to

1. Determine if and when the arrest was identified
2. Determine if instructions were provided
3. Determine if and when bystander CPR was started.
4. Identify any barriers that prevented timely arrest identification and CPR initiation.

A detailed sample QI Review form can be found at [Telephone-CPR QI](#). The form may be too much for some systems or not enough for others. Adapt this form to collect information that you feel will help your system.

The most important resource for information will be the 9-1-1 audio recording that should be reviewed by the individual or group responsible for QI. Part of the challenge is determining which calls are true cardiac arrests. Sometimes this requires information from the EMS field providers. A working relationship with EMS that can provide a list of true cardiac arrests can be very useful for efficient dispatch review. The EMS information about which calls were true arrests alerts dispatch to “missed cases” as well as true positives and false positives and so can help provide a comprehensive QI case capture. Of course this means the EMS need to be capturing and recording cardiac arrest as part of their QI efforts. Individual communication centers need to work within their EMS framework to identify the best strategy for case capture.
**Telephone-CPR QI Process Flow**

A process or flow diagram can help coordinate the activity and identify where any slow points occur. The flow diagram below provides a sample of the QI process.

1. **Identify cases of cardiac arrest** (Efficiency and effectiveness enhanced by working directly with field EMS).

2. **Obtain audio recording of the 911 call and the dispatch report including call time** (coordinate with the records custodian or supervisor to create a schedule for acquisition).

3. **Listen to each call and fill out a Telephone-CPR data form and a Telephone-CPR feedback form for the dispatchers.** Be sure to note especially good calls or poor calls that need follow-up for the training supervisor to review. Provide the feedback form to the dispatcher.

4. **Save the information.** A review can help guide improvements for subsequent efforts. Consider electronic data storage so that you can more efficiently run queries and generate summaries.

5. **The dispatchers and other stakeholders should receive regular reports showing this important information.**

6. **Survivor letters are also a great idea to send to the dispatcher and Communications Center training officer/supervisor.**
Feedback

Feedback to the dispatcher

The information collected with the Telephone-CPR QI Form should be shared and reviewed with the dispatcher who was involved in the case. This feedback should cover the QI basics of timely identification, provision of instruction, initiation of CPR, and potential obstacles. Assess each of these components as well as any other findings that you feel will enhance future performance. Select calls may serve to educate the entire dispatcher group. The following is an example of a simple Dispatcher Feedback form: (Telephone-CPR Feedback Form)

Recognition

When a patient survives, consider acknowledging the dispatchers involved in the event a follow-up letter, including a survivor pin in recognition of their contribution. For example:

Dear Dispatcher -------,

I want to acknowledge your lifesaving participation in the care of a patient who suffered cardiac arrest the afternoon of May 4, 2010. As you recall, this patient collapsed while mowing his lawn (or, was found unconscious by his wife, etc). You correctly and quickly identified the arrest and engaged the caller so that she started hands-only CPR. The EMS crew performed CPR, provided defibrillation, and was able to successfully resuscitate the patient and transport him to the hospital. I am pleased to report that he was discharged home awake and alert, and with an opportunity to again enjoy life.

I appreciate your dedication to providing lifesaving care. I recognize that we are constantly working to deliver best care while also evaluating promising approaches to push cardiac arrest survival even higher here in ------- County. Such efforts would not be possible without the hard work and commitment of you and your colleagues. Thank you for making a positive difference and improving the health of our community.

In appreciation,

Medical Director
------- County Emergency Medical Services

Quality Improvement Coordinator
------- County Emergency Medical Services

cc: Dispatch Administrator
    Training Officer
Implementation

Steps to launch and tips to stay afloat

Once you have received support and approval from leadership to implement a Telephone-CPR Program, you are ready to begin. Every community will have a different approach depending on resources and logistics. Below is one implementation plan that can be used as a guide.

<table>
<thead>
<tr>
<th>STEP</th>
<th>TASK</th>
<th>CONSIDERATIONS</th>
<th>TOOLKIT PAGE REFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Adopt AHA Program and Performance Standards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td>Measure current performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
<td>Select Protocol</td>
<td></td>
<td>Page 16</td>
</tr>
<tr>
<td>Step 4</td>
<td>Schedule training date(s), location and instructors</td>
<td>Allow plenty of time. Communication centers often schedule shifts, overtime, months in advance. Several months of lead time may be needed to allow supervisors to arrange schedules for training.</td>
<td></td>
</tr>
<tr>
<td>Step 5</td>
<td>Prepare training materials</td>
<td></td>
<td>Page 9</td>
</tr>
<tr>
<td>Step 6</td>
<td>Decide on launch date</td>
<td>Designate a date and time that dispatchers will begin to use the protocols. Make sure that everyone in the communication center knows when this will occur.</td>
<td></td>
</tr>
<tr>
<td>Step 7</td>
<td>Plan QI Program</td>
<td></td>
<td>Page 13</td>
</tr>
<tr>
<td>Step 8</td>
<td>Conduct training</td>
<td>Training should be conducted as close launch date as possible. Material will be fresh for dispatcher on launch day.</td>
<td></td>
</tr>
<tr>
<td>Step 9</td>
<td>Prepare press release and send to media</td>
<td>A consideration depending on your community.</td>
<td>Page 4</td>
</tr>
</tbody>
</table>
## Telephone-CPR

<table>
<thead>
<tr>
<th>Step 10</th>
<th>Prepare for media contacts</th>
<th>Designate a Public Information Officer (PIO) to handle media requests. A fire department PIO may also be available. Most fire departments have PIOs that are accustomed to handling media inquiries.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 11</td>
<td>Prepare protocols for comm center consoles</td>
<td>Protocols may be written or electronic. If written protocols are used, make sure they are in large font, easy-to-read, accessible and durable (tear proof and waterproof). There must be one copy for each working console in the communication center (include back up consoles).</td>
</tr>
<tr>
<td>Step 12</td>
<td>Launch Day</td>
<td>If you have a large center and expect cardiac arrests on the first day or two, have training staff available in the communication center to act as advisors, answer questions and provide support. Anticipate some anxiety for the first month or so. Any activity related to life and death decisions can make employees anxious.</td>
</tr>
<tr>
<td>Step 11</td>
<td>Begin QI activities</td>
<td>Begin reviewing calls as cases occur. There is no need to wait. The sooner feedback is provided, the more comfortable they will feel with delivering the instructions.</td>
</tr>
<tr>
<td>Step 12</td>
<td>Evaluate Program at six months</td>
<td>Elicit input from dispatchers, EMS, and other stakeholders such as the Dispatch Review Committee.</td>
</tr>
<tr>
<td>Step 13</td>
<td>Implement Continuing Education Plan</td>
<td>Select an existing dispatch continuing education program or develop one.</td>
</tr>
</tbody>
</table>
Telephone-CPR

Resources

The following are websites with information and facts relative to Sudden Cardiac Death and Telephone-CPR.

American Heart Association
http://www.heart.org/HEARTORG/

Resuscitation Academy Foundation
http://resuscitationacademy.org/
Articles


**Telephone-CPR**

**Toolkit Checklist**

You now have the following forms and information necessary to start a Telephone-CPR Program in your area:

- Info on your Regional or local EMS Council
- Letter of support template
- Position Statements/Press Releases from National Organizations
- Fact Sheet/Frequently Asked Questions
- Selling points for dispatchers
- Microsoft PowerPoint presentation to Dispatch Administration
- Training Outline, including Sample Lesson Plans and PowerPoint presentations
- Medical Direction and Physician Oversight Guide
- EMS Online for Dispatchers Brochure for Continuing Education
- Sample Telephone-CPR and Choking Protocols
- Implementation/Launch Steps
- Telephone-CPR QI Process Flow Diagram
- Telephone-CPR Feedback Form
- Sample Recognition/Survival Letter
- Articles related to Telephone-CPR
Appendix: A Special Section on Recognizing Agonals

Agonal breathing or gasps can occur in up to half of patients during the first moments following collapse from cardiac arrest. These breaths are not normal and instead are a sign that the brain is not receiving enough oxygen. Agonal breaths are often confused for a sign of life and so can deter efforts to correctly identify the arrest and start CPR. Recognizing agonals is an essential function of a Telephone-CPR program. Although challenging, dispatchers can identify agonals and use this appreciation to move forward with Telephone-CPR. The key is to ask the right questions and listen carefully to the caller’s description.

Ask the right questions

After determining the medical nature and location of the call, the dispatcher (or call receiver) should immediately ask if the patient is conscious.

If the patient is not conscious, the dispatcher (call receiver) needs to immediately ask if the patient is “breathing normally.” Normal Breathing is the key here. If the bystander (caller) is uncertain, have the bystander check the patient to determine if the chest is rising and falling in a normal pattern.

Once a patient is determined to be unconscious and not breathing normally, CPR should be initiated if not already ongoing. Do not delay CPR to ask additional “All Caller Questions”.

Buzz words

A caller will rarely know that the patient has agonal respirations and may be confused that these are signs of life. The Call Receiver needs to listen for certain clues or buzz words. Some of the more common buzz words used include:

- Gasping
- Gurgling
- Heavy Breathing
- Moaning
- Barely Breathing
- Occasional Breaths
- Snorting
- Weak Breathing
- Breathes Every Once in a while

Agonal Examples

Audio examples are invaluable to understanding how dynamic and challenging Telephone-CPR can be. These examples fill in concepts with real-world appreciation. The following links will take you to folders containing different examples of actual calls with agonals either heard on the line or described by the caller.

Agonals on recording
Agonals with buzz words
Buzz words only
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