

South Jordan City
1600 West Towne Center Drive
South Jordan, Utah 84095
(801) 254-3742
www.sjc.utah.gov

Project Cardiac React



Contact Information

Chris Evans, Chief
South Jordan City Fire Department
10758 South 1700 West
South Jordan, Utah 84095
Phone: (801) 254-0948 ext. 1601
Email: cevans@sjc.utah.gov

Project Cardiac React – Keep the Beat

Overview

As a result of the extraordinary commitment from the members of the South Jordan City Fire Department (“Department”) and other stakeholders, working from the ground up, the Department designed, developed, and brought to life Project Cardiac React; **a System of Care which is reducing heart damage, improving the quality of life, increasing survivability, and reducing health care costs of individuals who have a heart attack or sudden cardiac arrest.** The program is one of the most comprehensive pre-hospital cardiovascular initiatives in the Country. It is innovative in scope and approach and a model which may be used in other communities.

Project Cardiac React involves more than fifty strategies in a variety of areas including:

- An on-going community awareness campaign
- Widespread CPR/AED training
- A comprehensive Public Access Defibrillator (PAD) program
- Link to the local emergency medical dispatch system
- First responders and advanced life support personnel with heart ready enhancements
- Partnership with local hospitals to enhance existing and implement new services in the hospital as well as pre-hospital setting
- Enactment of new laws and ordinances
- A quality assurance program

The Department has engaged employees from nearly every division within the City, residents, employees of local businesses, and many other stakeholders to implement and maintain Project Cardiac React. Additionally, to assist other communities with the implementation of similar

strategies, Department leaders provide assistance, support, and program materials to others across the United States.

Community/Department Description

South Jordan City (“City”) is located in the Southwest portion of the Salt Lake Valley. With a population of about 52,732, it is the 11th largest city in Utah. The City is 22.1 square miles with a good mix of commercial and residential property. It is one of the fastest growing communities in Utah and more than 112,000 residents are expected at build-out.

The Department consists of 47 full-time firefighters (includes administrative and support staff) and 1 full-time assistant. Operating out of two fire stations members provide a wide variety of emergency and non-emergency services including but not limited to: fire suppression, Advanced-EMT quick response, Advanced Life Support ground ambulance, hazardous materials response, urban search and rescue, life safety inspections, and a variety of community wellness and education programs.

Situation Prior to Implementation

Prior to Project Cardiac React, with the exception of one CPR training class each month, the community-wide resuscitation efforts were limited to the minimum services required of an EMT-Basic quick response unit and Advanced Life Support (ALS) ground ambulance. While the Department met the minimum training/certification requirements, and all apparatus were staffed and equipped in accordance with applicable State regulations, they had not implemented additional strategies to improve patient outcomes from heart attack or Sudden Cardiac Arrest (SCA).

As mentioned, prior to implementation the Department did offer one CPR training class to the community each month. However, many were cancelled due to a lack of interest and

Project Cardiac React – Keep the Beat

Department administrators were considering eliminating the program because less than 35 people attended each year.

As it relates to patient outcomes, while the Department did not have data related to STEMI patients, they were aware that regardless of whether the patient was transported by ambulance or walked through the door of the emergency department on their own, few heart attack patients had their blocked artery opened within 90 minutes of arriving at the hospital (“door-to-balloon” time); and the survival rate for witnessed out-of-hospital cardiac arrest patients in the City was a dismal 7%. In fact, while he had been on the job for more than two decades, prior to 2006, Chief Evans had never witnessed a cardiac arrest patient survive-to-discharge from the hospital. However, that would change in 2006 and while at the time he did not realize it, the experience would have a profound impact on his life and the lives of others.

Over a five month period, on two separate occasions, Chief Evans witnessed bystanders and emergency responders from the Department save the life of a sudden cardiac arrest patient. This experience, along with more than two decades of personal observations while working in various disciplines of public safety, and information obtained through research, led Evans to develop the vision, desired outcomes, and outputs for a community-wide “heart-ready” initiative now known as Project Cardiac React.

Innovative/Creativity

The program has been described by others as innovative, creative, forward thinking, comprehensive, lifesaving, and a model for other communities to follow.

“This program will make a difference in the lives of South Jordan citizens and is a true model for other communities”.

*Sharon Brockett
AHA Community Strategies Manager*

“This initiative is a forward thinking plan which will help provide an important safety net for the citizens of South Jordan City. You are to be commended for your thoughtful effort in this regard”.

*Fred Lampropoulos, Chairman/CEO
Merit Medical Systems, Inc.*

“It is the most comprehensive I have seen to date internationally. You are going to save a lot of lives with this”.

*Dan Mohrbacher
AED Advocates*

“If you are going to have a heart attack, try to be in South Jordan when it happens”.

*Kristin Sokol
South Valley Journal*

“They do wonders. I’m proof of that and I can’t yell loud enough how proud I am to be a resident of South Jordan City”.

*Thomas Anderson
Sudden Cardiac Arrest Survivor*

A few of the key factors related to innovation and creativity include:

- It is comprehensive in nature and it led to the implementation of a wide variety of pre-hospital and in-hospital strategies related to the treatment of a STEMI heart attack or sudden cardiac arrest; it is a System of Care.
- It includes a collaborative effort with multiple City departments, residents, business leaders, local hospitals, emergency medical dispatch center, the Utah Department of Health, State and local elected officials, and many others.
- Most of the start-up expenses were provided through grants, donations, in-kind services and public-private partnerships; and it was implemented during a period when the operating

Project Cardiac React – Keep the Beat

budget for the Department was reduced and no new allocations were available.

- A new Chapter in State Law was created which not only consolidated and modernized Utah CPR & AED laws but also expanded the civil liability protection related to CPR & AEDs.
- A comprehensive local ordinance was adopted which requires the Department to maintain related services/programs and mandates AEDs in certain vehicles, new and existing occupancies, and recreational fields during certain activities.
- Department employees provide free CPR/AED training and other free support to assist local businesses and residents with establishing and maintaining an effective PAD program.

Development and Implementation

The vision, objectives, outputs, and budget were developed during 2007. In an effort to lay the foundation for implementation, shortly thereafter the Department began to engage, educate, and inspire stakeholders.

While they recognized certain aspects of the program would have a greater impact on patient outcomes than others, to ensure success, implementation was prioritized based on a number of factors such as available funding, obstacles, gaps, opportunities, the greatest good for the greatest number, and whether or not outside assistance or authorization was required. Implementation began in July of 2007 and has continued since.

The Department started by overhauling the CPR/AED training program, upgrading fire suppression quick response units from EMT-Basic to Advanced-EMT, and establishing the STEMI System of Care. They began to see positive results almost immediately which further inspired

stakeholders and led to new opportunities. Over the next three years the Department continued to chip away at the obstacles, develop program material, pursue funding and other support, and implement additional strategies. As of January 1, 2011, implementation is substantially complete.

See Appendix A for an overview of the outputs to date.

Expenses and Savings

The start-up costs were estimated at more than five-hundred thousand dollars. This included upgraded heart monitors for quick response units and ambulances, a non-invasive external cardiac support pump (CPR device) for ambulances, specialized training for all EMS personnel, additional equipment for other related service upgrades, an AED for every police and fire department vehicle, school, and government building, CPR training equipment and related supplies, software to assist with the tracking and maintenance of public access AEDs, and material and fees associated with a public awareness campaign.

To date the Department has not received any new budget allocations from the City in support of the program. It has been funded through the donation of money, equipment, and software, in-kind services, public-private partnerships, grants, and re-prioritization of existing funds within the Department operating budget.

The partnerships and grants/donations have resulted in substantial initial and on-going savings to the City, businesses, and residents. The grants, donations and in-kind services provided include:

- AEDs and AED training simulators
- Medical oversight
- A web based software solution to assist with the maintenance of the PAD program

Project Cardiac React – Keep the Beat

- Marketing services
- Specialized training for hospital/EMS personnel
- More than \$250,000 in cash
- Exclusive pricing for equipment

Additionally, the Department offers the following support to local businesses and residents:

- Free CPR/AED training
- Free site survey, prescription, operating guideline, and other implementation support
- Free access to a web based software program to assist with the maintenance of their PAD program
- Free post event support
- Discount pricing for equipment

Taking into consideration the initial cost of one AED and related equipment, replacement of electrodes and batteries as required, CPR training for twelve employees every two years, and other support such as assistance with maintenance of the AED, the ten year retail cost was estimated at more than \$6,700. However, in the City, due to the services offered by the Department and their partners, the same equipment and services for a ten year period is estimated at less than \$1,900.

When you consider the PAD support alone can cost about \$100 per year per AED, and whereas more than two hundred AEDs have already been placed throughout the City, the donation of the software solution coupled with the free services offered by the Department results in a savings of more than \$200,000 per year.

The Department has not reduced or eliminated any other service or program and has not added

any new employees to support Project Cardiac React. It was implemented with existing personnel and no new budget allocations.

Who is Benefiting from the Program

It has been said, “if you are going to have a heart attack, have it in South Jordan City.” In 2010, in South Jordan City,

- **Over 800 people completed a CPR/AED training class offered by the Department;**
- **On average, heart attack patients had their blocked artery opened in less than 90 minutes from calling 911;**
- **80% of all witnessed cardiac arrest patients received lay rescuer CPR before the ambulance arrived; and**
- **30% of witnessed cardiac arrest patients survived to discharge.**

While there is no question Project Cardiac React has had a positive impact on the lives of numerous South Jordan residents, the benefits extend far beyond the City. Department leaders continue to look for and/or create opportunities to encourage and assist others with implementing similar strategies in communities across the United States. A few examples include:

- In cooperation with a representative from the AHA, the Department organized, shared information, and continues to participate in several “STEMI” task forces in other regions of Utah.
- The Department collected the information and prepared and submitted a request to provide financial assistance for a pre-hospital 12-lead ECG program in about 25 other communities in Utah. The request has since been funded by the Utah Hospital Association and it is anticipated that all funds will be distributed by the Spring of 2011.

Project Cardiac React – Keep the Beat

- For several years several members of the Department served on the AHA Western States Community Strategies Council.
- Department members serve on the AHA Western States STEMI Task Force and newly created Utah STEMI Expert Advisory Panel.
- Articles on Project Cardiac React have appeared in several national publications and we continue to respond to requests for additional information as a result.
- Project Cardiac React was presented at Summit 2009 and Summit 2010 in Denver, Colorado.
- In November of 2010, the program was presented to approximately 200 people who attended the 4th Annual Heart Care Alliance Symposium sponsored by the South Carolina Hospital Association in Columbia, SC.
- All program related material has been organized on a CD for distribution, free of charge, to anyone who requests it. The disk and additional information has been shared with the AHA, Red Cross, and various communities throughout Utah as well as representatives from communities in Alaska, California, Colorado, Illinois, Kansas, Kentucky, Nevada, North Carolina, Ohio, and South Carolina.

The Department is committed to sharing information, program material, and providing assistance to others throughout the Country.

Lessons Learned

Conducting the research and developing the vision, desired outcomes, outputs, gaps, and opportunities was the easy part; implementation was much more challenging. It did take an extraordinary level of commitment by the City and Department to bring this program to life.

Do not assume others, including medical professionals, are informed as it relates to the problem and/or solutions. The Department found many stakeholders were not aware of the significance of the problem, assumed little could be done about it, thought the solutions would be cost prohibitive, felt the risk (liability) was greater than the benefit, and/or said performing CPR and the use of an AED is too complicated for a lay rescuer. Once informed most embraced the concept however, some still did not believe the Department could bring it to life due to the scope of the program, the collaboration that would be required, and the amount of funding needed.

A few of the key lessons include:

- Conduct a needs assessment to identify and evaluate the problem, gaps, challenges, and opportunities that exist in your community
- Develop a written plan
- Identify a program champion who has the knowledge, skill, ability, passion, and commitment to manage the process and lead others
- Engage, educate, and inspire stakeholders
- Anticipate concerns or obstacles and remove or mitigate the issue prior to implementation of the associated strategy
- Use public-private partnerships, in-kind services, donations, and grants
- Consider starting with strategies which require no outside assistance or authorization
- To evaluate the effectiveness of strategies, establish and begin tracking data points before implementation

Project Cardiac React – Keep the Beat

- Plan ahead as certain aspects of the program will take a year or longer to work implement

The program will have a profound impact on the lives of others, do not give up! With perseverance you will achieve the desired results

Who Championed the Innovation

While members of the South Jordan City Fire Department took the lead, many other individuals and organizations have also contributed to its success. They include:

- South Jordan City Elected Officials, the leadership team, and all other City departments.
- Fred Lampropoulos and Merit Medical Systems, Inc.
- Dr. Bart Johansen, Jon Butterfield and other representatives at IASIS Healthcare & Jordan Valley Medical Center
- First-Med Urgent Care, Sam's Club and Rocky Mountain Power
- Utah legislators
- ZOLL Medical Corporation
- En-Pro, Inc.
- American Heart Association
- Utah Bureau of Emergency Medical Services
- South Valley Journal

The success of the program is the result of a collaborative community-wide effort!

Appendix A: Project Cardiac React Outputs

The following information is intended to provide the reader with an overview of the progress to date as it relates to the implementation of Project Cardiac React. It is not meant to be all inclusive.

Awareness

The program goal, desired outcomes, and outputs have been written and shared with stakeholders in the City and others throughout Utah as well as across the United States. Awareness activities include:

- Designed and implemented a CPR/AED media blitz. It included an insert in the newspaper, ad in a community based newspaper paper, banners for street light posts, wraps on the rear of staff vehicles, use of an electronic message board, banners for pedestrian overpass, article and ad in the Chamber of Commerce magazine, and a PSA for the movie theater. See page 11 for examples of materials used in the blitz.
- Updated the department web page to include program related information.
- Drafted and presented the resolution to declare the 1st week of June as CPR and AED Awareness Week in the State of Utah and in South Jordan City.
- Developed a CPR/AED Public Service Announcement (PSA) which aired for several weeks before every movie in a local movie theater.
- A department “PAD Specialist” made personal contact with all existing businesses in the City that are required to comply with the new AED ordinance adopted by the City. In addition to leaving program related material with a responsible representative of the business, the Specialist explained the new ordinance and discussed the services offered by the department.
- On two separate occasions during 2010, an AED informational flyer was mailed to every business in the City.
- Assisted the American Heart Association with the development of the “Stacy Strong Story”; a CPR/AED PSA involving a local sudden cardiac arrest survivor.

Community Education

The enhancements to the CPR/AED training program include:

- The fee for CPR/AED training has been eliminated. CPR/AED training is provided **free of charge** to individuals who live, work or volunteer in the City.
- More than forty (40) firefighters have been trained and certified as CPR/AED instructors.



Project Cardiac React – Keep the Beat

- An electronic class registration process has been implemented.
- Additional training manikins and AED simulators have been acquired.
- At least three CPR/AED classes are offered each month. Additional classes are scheduled as needed.

Laws & Ordinance

The Department developed the draft, obtained a bill sponsor, and assisted with the presentation of the Utah Sudden Cardiac Arrest Survival Act; a new section in Utah law which consolidated, modernized, simplified, and expanded Utah CPR/AED Law. The bill passed with a unanimous vote. See page 7 for an overview of the law.

South Jordan City Municipal Ordinance 8.32 Project Cardiac React was drafted and presented to the City Council by the Department. The ordinance created a new section in City code requiring the Department to maintain certain cardiovascular related programs and services, mandating public access AEDs in certain new and existing occupancies, establishing the requirements for the mounting of AEDs, and establishing the penalty for tampering with an AED or failing to comply with the ordinance. The ordinance passed with a unanimous vote. All occupancies were required to comply as of July 1, 2010. See page 8 for an overview of the ordinance.

Public Access AED (PAD)

A comprehensive PAD program has been established. With the exception of the AED and related equipment, all services are provided at no cost to the business or resident. The program includes:

- Medical oversight by a licensed physician.
- The Department assists businesses with obtaining a prescription for the purchase of an AED.
- A PAD standard operating guide for schools, businesses, and police departments has been developed.
- Several firefighters have been trained as “PAD Specialists”. These individuals have the knowledge, skill and ability to assist a local business, school or homeowner with establishing a PAD program.
- A public-private partnership has been established with a major manufacturer of AEDs and other related equipment and supplies. Due to this relationship, among other services provided to the City, businesses and residents of the City have an option to purchase AEDs and related supplies using the City contract and at the same price as the City.
- As of January 1, 2011, more than 210 AEDs have been installed in various locations throughout the City. Currently AEDs are located as follows:
 - Police, fire, & animal control vehicles
 - City, County & State owned buildings with an occupant load of >50

Project Cardiac React – Keep the Beat

- Public, charter and private schools with an occupant load of >50
 - Hotels and motels
 - Apartment complexes (fitness room only)
 - Fitness clubs (greater than 1,200 sq.')
 - Churches
 - Grocery stores
 - Concession/scoring stands in the main city park
 - City sponsored events/gatherings
 - Numerous restaurants, dentist offices, medical offices, office buildings, retail centers, and other commercial occupancies (additional occupancies continue to come on line each month due to the City ordinance).
- A web based PAD software solution is available for use at no cost. This solution allows the site manager to manage and track their PAD program but do not have access to others throughout the City. The Department PAD Program Manager can view all registered AEDs throughout the City and monitor the status of monthly inspections, battery expiration, and pad expiration. The software automatically generates and sends an email to the site manager reminding them to check the AED and replace batteries and pads as required.
 - Post-event support (case review, data download, AED loan program, etc.) is provided by the Department.
 - A “Formal Notice of Violation” form has been developed and is being used to assist with addressing violations of the City PAD ordinance.
 - The annual life safety inspection conducted at all businesses by the Department now includes an inspection of the AED and related items.

Link to Local Emergency Medical Dispatch Services

The following strategies were in place prior to implementation of Project Cardiac React:

- All dispatchers are emergency medical dispatch certified.
- A priority medical dispatch system is utilized.
- Enhanced 911 and wireless/GPS enhanced 911 is in use.
- The center uses a Computer Aided Dispatch (CAD) system.
- Dispatchers provide instructions to callers on how to perform CPR and use an AED as needed.

As a result of Project Cardiac React the following has since occurred:

- Awareness training has been provided to personnel at the dispatch center.
- A web based AED registration system has been established.
- All registered AEDs are included in the CAD system. This allows the 911 operator to inform the caller if an AED is on site.

Project Cardiac React – Keep the Beat

Basic Life Support Enhancements

The training and certification of EMT's has been upgraded from EMT Basic to Advanced EMT. As a result, personnel on fire suppression apparatus are now trained, equipped and authorized to:

- Establish an IV
- Acquire & interpret an ECG
- Administer certain medications
- Use an advanced airway adjunct (endotracheal intubation or king tube)

Advanced Life Support Enhancements

Several service upgrades have been implemented with ALS Ambulances as the result of Project Cardiac React. This includes but is not limited to the following:

- Acquire, interpret, and transmit a 12-lead ECG.
- Field activation of the catheterization lab.
- Use of the EZ-IO infusion system to rapidly obtain a route to administer medications.
- EtCO₂ capability has been added to all cardiac monitors.
- Use of an external non-invasive cardiac support pump (CPR Device) to enhance the safety of responders while ensuring uninterrupted and high quality CPR during treatment and transport of SCA patients.
- Therapeutic hypothermia intra-arrest and for patients with Return of Spontaneous Circulation (ROSC). Note: The Department did sponsor one paramedic and their medical control physician in the Therapeutic Hypothermia "Boot Camp" sponsored by the Center for Resuscitation Science at Penn Medicine.
- Continuous Positive Airway Pressure (CPAP) for patients in severe respiratory distress.

Definitive Care

Representatives from the department approached administrators from a local hospital and presented information related to the development and implementation of related service upgrades. The two organizations worked together to provide for the inclusion of EMS in the heart care team, establish a STEMI System of Care which includes pre-hospital 12-lead ECGs and field activation of the catheterization lab, therapeutic hypothermia for cardiac arrest patients, the pre-hospital use of CPAP, and regular quality assurance meetings.

Quality Assurance/Improvement

An electronic patient care reporting system has been implemented. The Department did add a number of data fields that allows them to gather data related to STEMI's and sudden cardiac arrest.

All cardiac arrest and STEMI cases are reviewed by the Department EMS coordinator.

Bi-monthly meetings are conducted with stakeholders.

Project Cardiac React – Keep the Beat

Additional Activities

Representatives from the department have worked to assist others throughout the State and across the Country with the development and implementation of similar strategies. A few examples include the following:

- In cooperation with a representative from the AHA, the Department organized a STEMI Task Force in three different regions of Utah. It includes more than 10 counties and it is anticipated that by January of 2012, more than 90% of the population of Utah will have access to a STEMI System of Care as a result of the efforts of the task force.
- A representative of the department obtained the required information and submitted a grant/donation request to the Utah Hospital Association requesting funding for the upgrade of heart monitors (12-lead ECG module) for the EMS providers in each STEMI Task Force who did not have the technology. The project has been funded and distribution of the money began in January of 2011.
- A representative from the Department volunteers on the AHA Western States Affiliate STEMI Task Force.
- Representatives from the Department serve on the newly created Utah STEMI Expert Advisory panel.
- The department sponsored eight therapeutic hypothermia training sessions for EMS and hospital staff. A subject matter expert provided four sessions for EMS, two for physicians, and two for nurses. Each was tailored to the specific target audience and personnel from multiple hospital networks and more than 10 EMS agencies attended.
- A CD with all program material has been created. It is provided at no cost to anyone who requests a copy. It includes research material and all material created and used during the development, implementation, and maintenance of Project Cardiac React. The CD contains nearly 200 documents.

Major Donors

South Jordan City Project Cardiac React has been made possible through the generous donations of many businesses and individuals. Without the support of these donors the program would not be where it is today.

- Merit Medical Systems, Inc.
 - Fred Lampropoulos & Merit Medical Systems, Inc. donated \$150,000 to the City for use within Project Cardiac React. In addition to training, equipment, awareness material, and other items, this contribution funded the purchase of AEDs for the police department vehicles, schools, and allowed us to complete the placement of AEDs in City & County owned buildings.
- ZOLL Medical Corporation
 - ZOLL provided exclusive pricing to business and residents of the City. In addition, ZOLL Medical has supported the program through the donation of equipment and cash, marketing materials, mailers, and providing technical support and other activities.

Project Cardiac React – Keep the Beat

- En-Pro Management
 - En-Pro Management authorized the City to serve as a beta site for their Plus-Trac AED tracking program. As a result, AED owners within the City have the ability to use the program at no cost.
- Utah Department of Health
 - The Utah Department of Health, Bureau of Emergency Services (BEMS) provided a number of grants to assist with the purchase of equipment including: Cardiac monitors with EtCO2 and 12-lead ECG capability, external cardiac support pumps, and AEDs. Additionally, BEMS approved a variance to allow the Department to use Vecuronium as appropriate when using therapeutic hypothermia to treat SCA patients.
- Rocky Mountain Power
 - Rocky Mountain Power donated \$15,000 to the City for the purchase of the department's first external non-invasive cardiac support pump.
- Jordan Valley Medical Center - IASIS Healthcare
 - Jordan Valley Medical Center was the first hospital in our County to partner with the Department in the development and implementation of the STEMI System of Care as well as therapeutic hypothermia for SCA patients. Additionally, they purchased the 12-lead module for several heart monitors and are providing medical oversight for the PAD program.
- First-Med Urgent Care
 - The physicians of First-Med Urgent Care provide a prescription, as required by law, to purchase a public access AED.

State of Utah

U.C.A. Title 26 Chapter 8b. Utah Sudden Cardiac Arrest Survival Act

Highlights

- Requires the Utah Bureau of Emergency Medical Services to work with other organizations to encourage training in CPR and the use of an AED.
- Requires a person who owns or leases an AED to encourage potential users to participate in training in CPR and the use of an AED.
- Authorizes a person to perform CPR and use an AED without a license, certificate or other authorization if the person reasonable believes the other person is in Sudden Cardiac Arrest (SCA).
- Assuming the act or omission does not constitute willful misconduct or gross negligence, provides civil immunity for a person who:
 - Gratuitously and in good faith performs or fails to perform CPR or use or fail to use an AED (regardless of whether they are trained or not)
 - Teaches or provides a training course in administering CPR or using an AED

Project Cardiac React – Keep the Beat

- Acquires an AED
- Owns, manages, or is otherwise responsible for the premise where an AED is located
- Retrieves an AED in response to a perceived or potential SCA
- Authorizes, directs, or supervises the installation or provision of an AED
- Is involved with, or responsible for, reporting, receiving, recording, updating, giving, or distribution information relating to the ownership or location of an AED under the reporting requirement
- (physician) who gratuitously and in good faith issues a prescription for an AED or provides medical oversight for a public access program
- Requires a commercial owner of an AED to report the location of the AED to the local emergency medical dispatch center
- Requires a distributor of an AED to notify the purchaser of the requirement to report the location of the AED to the dispatch center
- Requires emergency medical dispatch centers to:
 - Establish a program to receive and manage information related to the location of AEDs
 - Inform the person who calls to report a possible cardiac arrest of the location of the AED

South Jordan City, Utah

Municipal Code Chapter 8.32. Project Cardiac React

Highlights

- Requires the South Jordan City Fire Department to develop, implement & maintain certain programs and services related to Project Cardiac React.
- Encourages individuals who may perform CPR or use an AED to complete a course of instruction in the administration of CPR and use of an AED.
- Requires the owner or occupant of certain **existing and new** buildings, structures or recreational fields to install and maintain an AED as follows:
 - Required in the following locations regardless of occupant load
 - Fire department vehicles
 - Police department patrol and school resource vehicles
 - Licensed healthcare provider (see exceptions in Chapter 8.32)
 - Dentist
 - Hotel or motel
 - Assisted living or care center

Project Cardiac React – Keep the Beat

- Penal or correctional facility
- Municipal and private golf course
- Fitness center or swimming pool of 1,200 square feet or larger
- Occupant load of more than 50 people
 - Governmental facility
 - Public, charter, or private primary or secondary school
 - Licensed child care facility
- Occupant load of more than 150 people
 - All public or private buildings or structures, or portion thereof, not otherwise identified above
 - Public or commercial recreation or sporting field during sporting events at which more than 150 people are in attendance at any given time
- Establishes the requirements for distribution and accessibility of AEDs.
- Prohibits any person from removing, tampering with, or otherwise disturbing an AED or related equipment except as needed to respond to a potential emergency or provide maintenance.
- Requires a person who owns or leases an AED to report the location of the AED to Valley Emergency Communications Center.
- Requires the owner of an AED to notify the Fire Department following the use of an AED.
- Establishes the penalties for violation of any section or subsection of the Chapter.



There's one *good* reason to have a heart attack in South Jordan



South Jordan paramedics demonstrate new life-saving technology.

By Kristin Sokol

If you're going to have a heart attack, try to be in South Jordan when it happens. South Jordan paramedics are the first in the state to use a new technology designed

in South Jordan have partnered with Jordan Valley Hospital in an effort to speed up the treatment process for these victims.

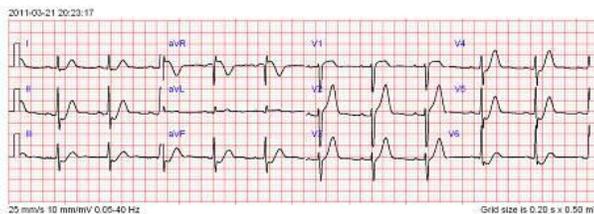
When responding to a heart attack

- Patient Name: A, M. Age/Sex: 48 y M Date: 3/21/11
- Responding Agency: SJFD #61 (B shift)
- Crew: Chad Jensen, Andrew James, Mike Richards, Weston Walker
- Dispatch/at scene/transport times: 2012/2016/2025
- P12L obtained/received times: 2022/2023
- EMS arrival to hospital: 2038
- Code STEMI initiated: 2024
- Patient arrived in cath lab: 2114
- Reperfusion Time: 2131
- Door to Balloon Time: 53 minutes
- 911 call to Balloon Time: 79 minutes

➤ **Case details and outcome:** Mr. A had sudden onset of CP while exercising, with weakness, SOB, diaphoresis and called EMS. Upon arrival, EMS acquired 12 lead EKG, transmitted to JVMC and Code SteMI initiated from patient's home. O2, IV, NTG and morphine given en route to ED. Meds given in ED.

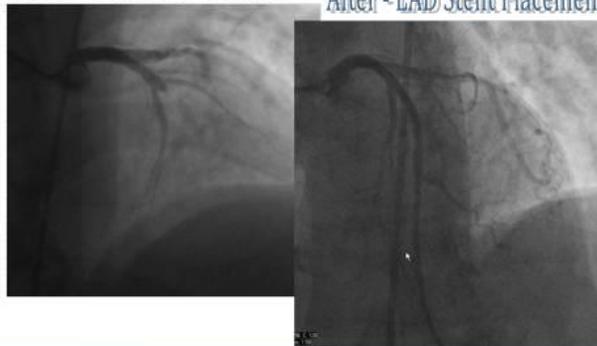
Angiography showed 100% LAD occlusion. Angioplasty and a stent were placed with good results. Patient was d/c to home on 3/23/11 with instructions to f/u with cardiology in 1 week

➤ **Great Job SJFD!!!!**



Before - 100% LAD occlusion

After - LAD Stent Placement



Project Cardiac React – Keep the Beat

I don't even know who to address this to, nor do I remember the faces of the young men who responded to the 911 call on Wed, Feb 2 to RiverPark Development. Without your quick response & treatment I would not be here today.

The heart attack I had was a complete surprise and I understand that chances of survival of this type are 10 in 100 without prompt medical attention.

I just wanted to say thank you - and also thank you to the off-duty

fireman that responded to the call.

Without your help I wouldn't get to see my grandchildren grow up.

Thank you from the bottom of my "still beating" heart.

you are my heroes!

Sandy Moore

2011

SOUTH VALLEY Journal

Serving The South Valley Since 1991



A big step in South Jordan's Heart Healthy Community plan could save your life

By Kristin Sokol

Imagine being out enjoying a baseball

South Jordan firefighters have your heart on their brains

By Kristin Sokol

Saving your heart and life, that's the goal of South Jordan Paramedics' Heart Safe Community Program.

Paramedics want to increase the less than 7 percent survivability rate of people who experience a sudden cardiac arrest. "Our goal is to increase the survival rate to 30 percent in the next 24 months," Fire Chief Chris Evans said. "The program has already had a tremendous impact on the lives of several of our residents."

Thanks to a \$150,000 grant from Merit Medical, South Jordan has increased life-saving defibrillators [AED] the city owns from eight to 88.

"This partnership with Merit Medical has allowed us to place at least one AED in every police car, every school, every city

a community awareness and training campaign. "The first thing people should know is to call 9-1-1 if they have symptoms of a heart attack. We can't help people unless they call. Most people provide their own transportation to the hospital, which can waste precious time and heart muscle," South Jordan Paramedic Nathan Morreale said.

Widespread cardiac emergency training for the public, including CPR and training on how to use an AED is also a key to the program. Firefighters now teach free classes to anyone who lives or works in South Jordan. Paramedics also teach CPR and AED training classes on location to church, neighborhood and civic groups at no charge. Information about the classes can be found on the city's website

our spouse or you suddenly falls to the ground cardiac

not knowing or help. The person lying on the ground is not breathing and has no pulse. Only 7 percent of people survive a sudden cardiac arrest. If you are taking steps to help, you are taking a big step in saving lives. It's not too late to help. It's fast to help. It's automatic. It's a life-saving device given in time.



South Jordan City Councilmember Aleta Taylor (pictured) says using an

g when you think about the lives they can save. One of the essential characteristics of a community is to look after the health and welfare of

Project Cardiac React – Keep the Beat

Heroes aren't born. They're trained. See ad inside for details.

Project Cardiac React

Every day in the United States about 350 sudden cardiac arrest deaths occur, not all hospital or in the emergency room.

Being trained to perform cardiopulmonary resuscitation (CPR) can help save lives.

Keep the Beat
PROJECT CARDIAC REACT

BY ROBERT J. DALLEY

Kent Money, South Jordan's mayor, is a man who knows CPR. He's been trained to perform cardiopulmonary resuscitation (CPR) for over 10 years. He's also a firefighter, and he's seen the importance of CPR in saving lives. He's also a father, and he's seen the importance of CPR in saving his own children. He's also a community leader, and he's seen the importance of CPR in saving lives. He's also a man who knows CPR. He's been trained to perform cardiopulmonary resuscitation (CPR) for over 10 years. He's also a firefighter, and he's seen the importance of CPR in saving lives. He's also a father, and he's seen the importance of CPR in saving his own children. He's also a community leader, and he's seen the importance of CPR in saving lives.

Saving a life is within your reach?

The AED Plus Features:

- Real CPR help for rate and depth of compressions
- Support for the complete Chain of Survival
- Voice, text and graphical prompts
- Easy-to-use one-step CPR Coach™ that last 1 year
- Consumer lifetime business that last 5 years
- The highest protection rating (IP55)

Special Pricing for Business and Residents of South Jordan

801-254-0948

THIS LIFE WAS SAVED BY SOMEONE WHO KNEW CPR

Heroes aren't born. They're trained.

Sign up on-line or call 801.254.0948

www.sjc.utah.gov

THIS LIFE WAS SAVED BY SOMEONE WHO KNEW CPR

Heroes aren't born. They're trained.

Sign up on-line or call 801.254.0948

www.sjc.utah.gov

THIS LIFE WAS SAVED BY SOMEONE WHO KNEW CPR

Heroes aren't born. They're trained.

Sign up on-line or call 801.254.0948

www.sjc.utah.gov

THIS LIFE WAS SAVED BY SOMEONE WHO KNEW CPR

Heroes aren't born. They're trained.

Sign up on-line or call 801.254.0948

www.sjc.utah.gov

SOUTH VALLEY Journal

Serving The South Valley Since 1991

Heart health hurdle cleared thanks to new legislation spurred by South Jordan

By Kristin Sokol

After years of effort, South Jordan's Heart Safe Community is one step closer to saving your life.

A new law proposed by South Jordan and sponsored by Rep. Carl Wimmer that would consolidate, modernize and simplify Utah CPR and automatic external defibrillator laws, was passed by the state legislature Feb. 6. The law aims to make it easier for people to find and use AEDs and liability protections provided by the state.

"This bill has the potential to save lives, bring help and support to our most vulnerable citizens and our most vulnerable victims and our most vulnerable citizens," Councilmember Leona Williams said.

City officials hope the new law will encourage residents who are in a cardiac-related emergency to call 911 and use an AED. They therefore will provide a measure of liability protection. South Jordan's Fire Chief Chris Evans thought up the new bill and was instrumental in getting it passed.



Don't just stand there, Cardiac React!

By Kristin Sokol

If you're in South Jordan, you can now do something that could make a dramatic difference in saving someone's life.

Starting July 1, if you're in any public place that serves more than 150 people you are within 425 feet of an Automatic External Defibrillator, thanks to a new ordinance recently enacted by the city council requiring AEDs to be maintained in all public places with few exceptions.

"We are going to save some lives in this city because of this program. In fact it already has! I know people whose lives have been saved through these programs," South Jordan's mayor Kent Money said.

According to South Jordan Fire officials, there has always been a huge gap in the community's ability to respond to cardiac emergencies. The new ordinance requires AEDs in all fire department vehicles, all police vehicles, and in all public places that serve more than 150 people.

Fire Chief Chris Evans said, "Cardiovascular disease is the leading cause of death in this country and South Jordan is not exempt from that. People just accept it as a way of life, thinking that nothing can be done and people are going to die, but they don't have to die a premature death. We know there are ways to reduce the death toll and widespread deployment of AEDs is one of them."

The new ordinance requires AEDs in all fire department vehicles, all police vehicles, and in all public places that serve more than 150 people.



South Jordan Heart Safe Initiative goes cold and saves a life

By Kristin Sokol

South Jordan's Heart Safe Initiative has added another life saving component, Induced Therapeutic Hypothermia after sudden cardiac arrest.

Paramedics say inducing Therapeutic Hypothermia will give a cardiac arrest victim's neurologic functions a better chance at normalcy after recovery. One South Jordan resident has already received the lifesaving treatment just one day after paramedics implemented the program.

Thomas Anderson experienced sudden cardiac arrest Nov. 4 while at home watching television with his wife.



South Jordan woman owes life to CPR and Project Cardiac React

By Kristin Sokol

Father's Day 2010 will be a day South Jordan resident Rick Strong will never forget, but it's not because of any presents he received. It's the day he and South Jordan Paramedics saved his wife's life.



Stacy Strong, a healthy 38-year-old active mother of three with no family or personal history of heart disease or arrhythmia, for some unknown reason had a sudden cardiac arrest just after waking up that morning.