Consider a story on Napa County Emergency Medical Services (EMS):

You have a much greater chance of surviving cardiac arrest in Napa County, compared to the national average

Your readers or listeners will learn:

- That they or their loved ones may be saved by Napa County's successful EMS cardiac arrest protocols;
- That Napa County EMS is continually working to improve patient outcomes;
- That they may very well see people being treated for cardiac events where the event happens;
- That even passersby can help to save a life by beginning chest compressions, with no need for mouth-to-mouth;
- That patients can also help themselves by heeding early warning signs.
- That Queen of the Valley Medical Center has initiated a program designed to get Automatic External Defibrillators (AEDs) in all public schools and other sites in Napa County.

Napa County EMS

Napa County Emergency Medical Services is a dynamic emergency medical care delivery system, focused on rapid access, assessment, stabilization and transportation when emergency services are necessary.

That system includes dispatchers, firefighters, paramedics, ambulance personnel and emergency room staff, all working together to save lives.

The Napa County EMS Agency (part of Napa County) works to plan, evaluate and implement our life-saving system. Find out more at www.countyofnapa.org/EMS.

According to data compiled from the first six months of 2012, someone who experiences cardiac arrest in Napa County is much more likely to survive: Our out-of-hospital cardiac arrest survival rate for Jan. 1 through June 30 was 31%, well above the national average of 5% to 7%.

Napa County's emergency medical services (EMS) providers attempted resuscitation on 32 cardiac arrest patients from Jan. 1 to June 30; 10 ultimately survived (admittedly a small sample size). Published comparison rates from US cities include Seattle at 46%, Chicago 3%, San Francisco 25%, New York 5%, Los Angeles 7% and Miami 25%.

Cardiac arrest is the abrupt cessation of function of the heart due to a disturbance in the rhythm or electrical conduction within the organ: The person's heart has stopped beating. An estimated 325,000 people die each year from cardiac arrest, because resuscitation must begin within 3-5 minutes to prevent irreversible brain damage and death.

Changes in procedures

As of Feb. 1, Napa County EMS initiated innovative new procedures system-wide for paramedics and emergency medical technicians (EMTs) in treating cardiac arrest patients. Recent scientific evidence has shown that any interruption in chest compressions, even a few seconds, performed during cardiopulmonary resuscitation (CPR) decreases the chance of survival.

New:

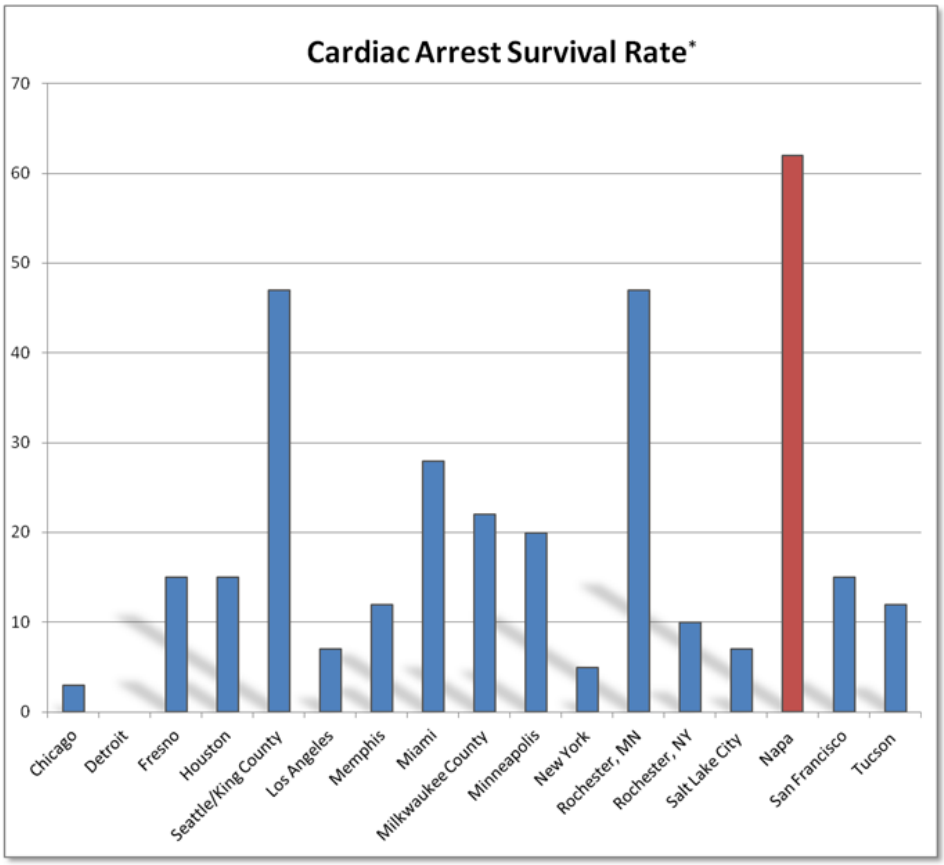
- Introduced a breathing tube and method of administering medications that can be used without stopping compressions.
- Began using the ResQPOD, a device that improves blood flow to the brain, and applying ice packs to slow down metabolic processes.
- Most dramatic change: a stay-on-scene approach. Because compressions are always interrupted during patient transfer and transport, EMS personnel, working like a NASCAR-modeled "pit crew," now conduct most cardiac arrest resuscitations at the scene, rather than immediately transporting to a hospital. This approach ensures uninterrupted chest compressions and the greatest chance of survival.

What's next

The Napa County EMS Agency plans to institute more enhancements to cardiac resuscitation procedures. The agency is also embarking on a public information campaign through the County Emergency Medical Care Committee (EMCC) to both improve access to public access defibrillators and to encourage people to seek preventive medical attention, as 75% of patients who suffer cardiac arrest demonstrate some warning signs (*see reverse*).

The story is even better when the patient presented with an initial heart rhythm of ventricular fibrillation or ventricular tachycardia, meaning that emergency personnel or bystanders with an AED can shock the patient's heart:

an astounding 61% survived!



Cardiac arrest vs. heart attack

Sudden cardiac arrest isn't the same thing as a heart attack.

A **heart attack** is a "plumbing" problem, where a blockage causes part of the heart to die. 75% of people who are having a cardiac event experience one or more of the classic "signs and/or symptoms" of a heart attack:

- chest pain;
- chest or abdominal discomfort, heaviness, squeezing, burning or tightness;
- pain radiating or isolated to jaw, shoulders or back;
- nausea;
- diaphoresis (sweating);
- dizziness; trouble breathing;
- anxiety; or back pain

Sudden Cardiac Arrest is an electrical signal problem that causes the heart to stop pumping blood. SCA could be caused by a heart attack or other causes such as suffocation or trauma. Cardiac arrest is very serious; because the heart has stopped beating, the patient is technically "dead."

Cardiac Arrest Survival Rates – Story Contacts

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