

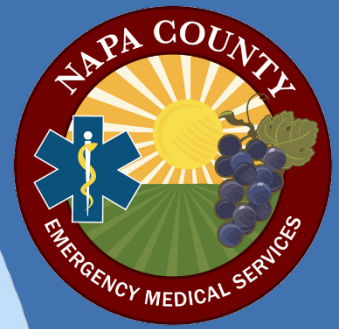
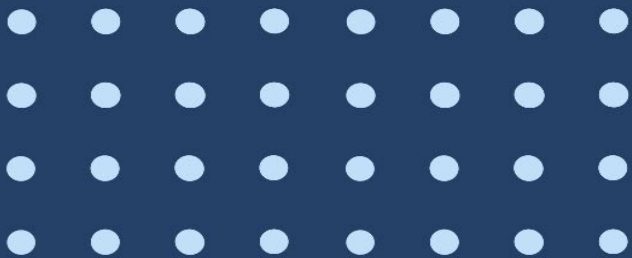
# NAPA COUNTY

EMERGENCY MEDICAL SERVICES

## APPENDIX 2

### STROKE SYSTEM PLAN

2019 – 2024



NAPA COUNTY

Health & Human  
Services Agency



[www.countyofnapa.org/ems](http://www.countyofnapa.org/ems)

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**EMERGENCY MEDICAL SERVICES AUTHORITY**

11120 INTERNATIONAL DR., SUITE 200  
RANCHO CORDOVA, CA 95670  
(916) 322-4336 FAX (916) 324-2875



May 6, 2025

Shaun Vincent, EMS Administrator  
Napa County Emergency Medical Services Agency  
2751 Napa Valley Corporate Dr., Bldg. B  
Napa, CA 94558

Dear Shaun Vincent,

This letter is in response to Napa Emergency Medical Service (EMS) Agency's 2019-2024 EMS, Trauma, St-Elevation Myocardial Infarction (STEMI), Stroke, and Quality Improvement (QI) plan submissions to Emergency Medical Service Authority (EMSA) on March 10, 2025.

EMSA has reviewed the EMS plan based on compliance with statutes, regulations, and case law. It has been determined that the plan meets all EMS system components identified in Health and Safety Code (HSC) § 1797.103 and is approved for implementation pursuant to HSC § 1797.105(b). Based on the transportation documentation provided, please find the enclosed EMS area/subarea status, compiled by EMSA.

EMSA has also reviewed Trauma, STEMI, Stroke, and QI plans based on compliance with Chapters 7, 7.1, 7.2, and 12 of the California Code of Regulations, Title 22, Division 9, and has been approved for implementation.

Per HSC § 1797.254, local EMS agencies must annually submit EMS plans to EMSA. Napa County EMS Agency will only be considered current if an EMS plan is submitted each year.

Your 2025 EMS plan will be due on or before May 6, 2026. Concurrently with the EMS plan, please submit an annual Trauma, STEMI, Stroke, and QI plan.

If you have any questions regarding the EMS plan review, please contact Roxanna Delao, EMS Plans Coordinator, at (916) 903-3260 or [roxanna.delao@emsa.ca.gov](mailto:roxanna.delao@emsa.ca.gov).

Sincerely,

*Angela Wise*

Angela Wise, Branch Chief  
EMS Quality and Planning  
On behalf of,  
Elizabeth Basnett, Director

Enclosure:  
AW: rd

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Napa County 2019-2024 EMS Areas and Subareas	Non-Exclusive	Exclusive	Method to Achieve Exclusivity	Emergency Ambulance	ALS	LALS	All Emergency Ambulance Services	9-1-1 Emergency Response	7-digit Emergency Response	ALS Ambulance	All ALS and CCT Ambulance Services	BLS Non-Emergency	Standby Service with Transport Authorization
	EXCLUSIVITY			TYPE			LEVEL						
Napa - Entire County		X	Competitive	X				X	X				X

## INTRODUCTION

The Napa County Emergency Medical Services Agency's Stroke Critical Care System Plan has been written in accordance with Title 22, Division 9, Chapter 6.3 of the California Code of Regulations.

Stroke care continues evolving rapidly. The Napa County stroke system was developed in partnership with LEMSA staff, dispatch providers, pre-hospital personnel, hospital leadership, stroke program coordinators, and neurologists. Each group continues to play an important role in the stroke continuum of care.

The Napa County EMS System averages approximately 200 "Stroke Alerts" by EMS annually, and around 25% of these patients receive thrombolytic treatment. Ninety percent of all Napa County stroke patients receiving thrombolytic treatment arrive via EMS, and the remaining ten percent arrive as "walk-in" patients. Napa County has two hospitals, Queen of the Valley Medical Center, and Adventist Health St. Helena. Both are Joint Commission accredited and EMS designated Primary Stroke Receiving Centers.

## STROKE PROGRAM GOALS AND OBJECTIVES

- Objective #1: Maintain existing agreements with all Napa County Stroke Receiving Facilities
  - Process: Contract management with the EMS Administrator and hospital leadership
  - Timeline: This goal has been achieved. This is a yearly and ongoing timeline.
- Objective #2: Collaborate with system partners to develop new innovative methods for public stroke education and awareness
  - Process: Through the Public Information and Education (PIE) committee
  - Timeline: Meeting occurs 3-4 times annually, ongoing
- Objective #3: Identify and reduce disparities in care between race and sex
  - Process: Through the Cardiovascular Systems of Care (C-SOC) meeting
  - Timeline: Measured bi-annually, ongoing
- Objective #4: Minimize death and disability from strokes by reducing door-to-needle times
  - Process: Through the Cardiovascular Systems of Care (C-SOC) meeting and annual policy updates for pre-hospital personnel.
  - Timeline: Median door-to-needle times measured bi-annually, ongoing
- Objective #5: Minimize death and disability from Large Vessel Occlusion (LVO) strokes by reducing Door-in-Door-out (DIDO) times
  - Process: Through the following meetings: Cardiovascular Systems of Care (C-SOC), Northbay Regional Stroke Collaborative, and Queen of the Valley's Stroke Steering Committee.
  - Timeline: Median DIDO times measured bi-annually, ongoing

## EMS AGENCY PERSONNEL WHO HAVE A ROLE IN THE STROKE CRITICAL CARE SYSTEM:

- Shaun Vincent, EMS Administrator
- Karl Sporer, MD, EMS Medical Director
- Eric Paulson, EMS Specialist - Clinical

## **STROKE DESIGNATED FACILITIES AND AGREEMENT EXPIRATION DATES:**

- Queen of the Valley Medical Center – Primary Stroke Receiving Center (PSRC)
  - Stroke agreement expiration date: December 31<sup>st</sup>, 2029
- Adventist Health St. Helena – Primary Stroke Receiving Center (PSRC)
  - Stroke agreement expiration date: August 14<sup>th</sup>, 2027

The Napa County EMS Agency designated Queen of the Valley Medical Center as a primary stroke receiving center within county limits beginning January 1, 2019 and Adventist Health St. Helena as a primary stroke receiving center within county limits beginning August 20<sup>th</sup>, 2021. Sutter Solano Medical Center and Kaiser Permanente Vallejo Medical Center are approved out-of-county stroke receiving centers. There are no written agreements with either facility as they are the purview of the Solano County EMS Agency. Additionally, there are no Comprehensive or Thrombectomy-Capable Receiving Centers in Napa County or neighboring counties.

## **POLICIES RELATED TO STROKE PATIENT IDENTIFICATION AND DESTINATION POLICIES:**

- See Attachment 1A. (501 Patient Destination)
- See Attachment 1B. (M-19 Stroke/CVA/TIA)
  - This policy includes two stroke-screening exams:
    - The Cincinnati Pre-Hospital Stroke Screen (CPSS) assessing for strokes in the anterior portion of the brain; and
    - The Napa-Marin (NaMar) stroke screen, assessing for strokes in the posterior portion of the brain.

## **POLICY FOR FIELD COMMUNICATION TO THE RECEIVING HOSPITAL-SPECIFIC TO STROKE PATIENTS:**

- See Attachment 1C. (502 Hospital Notification)

## **POLICY FOR INTER-FACILITY TRANSFER OF STROKE PATIENTS:**

- See Attachment 1D. (504 Inter-Facility Transfer)

## **DATA COLLECTION:**

The Napa County EMS Agency completes a 100% audit of all EMS initiated “Stroke Alerts,” defined as pre-hospital provider confirming acute stroke symptoms with early notification and rapid transport to the closest appropriate stroke receiving center. The Stroke Alert reports are generated through the local ImageTrend data repository. Additionally, First Pass completes the analytics for many of the Pre-Hospital Stroke Data Metrics listed below. Pre-Hospital Stroke Metrics

- Last Known Well Time documented in clock time
- Stroke assessment documented
- Blood glucose level documented
- IV established
- Scene time ≤ 10 min
- Median scene time
- “Stroke Alert” documented when the LKWT < 24hrs from pt contact time
- “Stroke Alert” documented for all confirmed strokes arriving by EMS

- Destinations for EMS “Stroke Alerts”
- 100% QA for confirmed acute strokes.

Queen of the Valley Medical Center, Adventist Health St. Helena, Kaiser Permanente Vallejo Medical Center, and Sutter Solano Hospital all utilize American Heart Association’s Get With The Guidelines (GWTG) - Stroke to collect and submit data. The Napa County EMS Agency has GWTG agreements with all hospitals identified by Napa County EMS as a Stroke Receiving Center to access information regarding clinical performance data. This data is analyzed and shared biannually with all hospitals and the EMS system to identify areas for improvement.

#### Primary Stroke Receiving Center Metrics:

- Median Door to CT time
- % Door to CT is  $\leq 25$  minutes
- Median CT to Needle time
- Median Door to Needle time
  - Disaggregated by method of arrival (EMS vs. Walk-in)
- % Door to Needle is  $\leq 45$  min
- % Door to Needle is  $\leq 30$  min
- Median EMS to Needle time
- Method of arrival
- Canceled EMS Stroke Alerts/False Positives
- Door-In-Door-Out (DIDO) times for Large Vessel Occlusion (LVO) transfers
- Total thrombolytic administrations per facility
- Sex
- Race/Ethnicity
- Median Age

#### **POLICY AND DESCRIPTION FOR USING OUT-OF-COUNTY STROKE RECEIVING CENTERS:**

- See Attachment 1A. (501 Patient Destination)

Sutter Solano Medical Center and Kaiser Permanente Vallejo Medical Center are Napa County EMS Agency approved out of county stroke receiving centers. Both facilities have designated Stroke Program Managers and Directors. Each Stroke Program Manager attends Napa County EMS Agency’s Cardiovascular Systems of Care meeting, wherein we conduct a system level overview of pre-hospital and hospital performance including multiple case reviews.

#### **STROKE QUALITY IMPROVEMENT COMMITTEE:**

The Napa County EMS Agency hosts a Cardiovascular Systems of Care (C-SOC) meeting. This is a multi-disciplinary group advisory to the EMS Medical Director whose purpose is to review Stroke, STEMI, and Cardiac Arrest. It is comprised of designated representatives from the EMS Agency, designated in-county and out-of-county receiving centers, and ALS provider agencies. This meeting links prehospital and hospital to offer high-level overview and drives system changes to improve the stroke care of Napa County patients.

- See Attachment 1E. (Cardiovascular Systems of Care Charter)

Additionally, the Napa County EMS Agency completes a 100% audit of all EMS initiated “Stroke Alerts,” defined as pre-hospital provider confirming acute stroke symptoms with early notification and rapid transport to the closest appropriate stroke receiving center. The Napa County EMS Agency strives to offer real-time clinical feedback directly to the field providers. To supplement

stroke education, we created an online training video detailing the posterior stroke screening assessment for all Napa County EMS Providers.

Queen of the Valley Medical Center hosts a quarterly Stroke Steering Committee comprised of in-hospital staff from the Emergency Department, Intensive Care Unit, Radiology Department, Physical Therapy Department, and a designated representative from the Napa County EMS Agency. The purpose of this group is to review internal performance metrics, similarly aligned with GWTG-Stroke.

Genentech hosts the quarterly Northbay Stroke Collaborative Meeting. This is comprised of Northern California stroke receiving centers, industry representatives, and local EMS agencies. The purpose of this group is to share best practices and build relationships across the northern California region.

## **PUBLIC EDUCATION SPECIFIC TO STROKE:**

The Napa County EMS Agency conducts triannual Public Information Education meetings comprised of all EMS stakeholders. The purpose of this group is to identify the best locations and platforms to distribute public health education specifically regarding Stroke, STEMI, and Cardiac Arrest. When hosting CPR or AED training for the public, this group actively educates on identifying stroke symptoms and activating 9-1-1 resources immediately. During these events, wallet sized tri-fold cards explaining stroke symptoms are distributed in both English and Spanish.

- See Attachment 1F. (Tri-Fold Card)

Additionally, Adventist Health St. Helena offers free cholesterol screenings, blood pressure checks, and blood glucose testing at various Napa County community events in an effort to identify stroke risk factors.

## **ANNUAL UPDATE:**

Any changes in a stroke critical care system since submission of the prior annual plan update or the Stroke Critical Care System Plan addendum.

- Since submission of our stroke plan in 2019, Adventist Health St. Helena became designated as a Primary Stroke Receiving Center in Napa County on August 14<sup>th</sup>, 2021. This has increased access to critical healthcare for residents residing in the northern most area of Napa County.
- Queen of the Valley Medical Center, and Adventist Health St. Helena began using Tenektopase in lieu of Alteplase. Queen of the Valley Medical Center has installed a new CT machine closer to their Emergency Room with intent to provide quicker CT scanning of potential stroke patients.

The status of the Stroke Critical Care System Plan goals and objectives:

- The Napa County EMS system continues to reach the outlined goals and objectives. We continue to see decreasing door-to-needle times for our stroke receiving centers. We are still working towards reducing DIDO times for LVO patients. This continues to be a challenge with limited Critical Care Transport (CCT) availability. Reducing DIDO times is a focus in every QI meeting and a topic of interest throughout the region.

Stroke critical care system performance improvement activities:

- During the first annual Napa County EMS Symposium in 2022, the Napa County EMS Medical Director presented on posterior and cerebellar stroke assessment education.
- Stroke education review for all Napa County EMS providers during the annual policy update trainings.



- Two videos available to all Napa County EMS providers demonstrating how to properly assess for posterior and cerebellar strokes. This video shows the stroke screening performed on four different patients.
- Continued involvement in all pre-hospital and hospital stroke meetings
- Solano/Napa data presentation to the Northbay Stroke Collaborative group on reducing DIDO times.
- Implementation of First Pass data program implemented to collect and analyze pre-hospital performance stroke metrics.

# **Attachment 1A:**

## **501 Patient Destination**



# Patient Destination

EMS ADMINISTRATION 501

PURPOSE	<p>I. To assist in determining the most appropriate receiving facility for patients transported as part of an EMS response.</p>			
POLICY	<p><b>I. APPROVED EMS RECEIVING FACILITIES</b></p> <p>A. Patients shall be transported to the nearest appropriate California licensed emergency receiving facility which is equipped, staffed and prepared to receive emergency cases and administer emergency medical care appropriate to the needs of the patient as set forth herein.</p> <p><b>NOTE:</b> This does not preclude the transport of a patient to other facilities during the course of nonemergency inter-facility transfers (IFTs) or scheduled non-emergency transports at the request or direction of the patient's private physician.</p> <p>B. Approved receiving facilities within Napa County include:</p>			
	Facility Name	ED Status	Designations	Location
	Adventist Medical Center St. Helena (SHH)	Stand-by	<ul style="list-style-type: none"> <li>- STEMI</li> <li>- Stroke</li> </ul>	10 Woodland Rd. St. Helena, CA 94574
	Queen of the Valley Medical Center (QVMC)	Basic	<ul style="list-style-type: none"> <li>- Base Hospital</li> <li>- STEMI</li> <li>- Stroke</li> <li>- Trauma – Level III</li> <li>- OB</li> </ul>	1000 Trancas St. Napa, CA 94559
	<p><b>II. DESTINATION DETERMINATION</b></p> <p>A. The destination for patients shall be based upon the clinical capabilities of the receiving facility and the patient's condition. Although the criteria listed below are the primary factors for determining the appropriate destination for patients, when the patient's condition is unstable or life threatening, the patient should be transported to the closest appropriate hospital.</p> <p>B. The following factors may also be considered in determining patient destination:</p> <ol style="list-style-type: none"> <li>1. Patient request.</li> <li>2. Family request.</li> <li>3. Patient's physician request or preference.</li> </ol> <p>C. Destination For STEMI Patients:</p> <ol style="list-style-type: none"> <li>1. Patients with suspected acute coronary syndrome and/or a documented STEMI shall be transported to the closest STEMI Receiving Center.</li> </ol>			

2. Approved STEMI Receiving Centers:
  - a. Adventist Medical Center St. Helena.
  - b. Queen of the Valley Medical Center.
  - c. Kaiser Permanente Vallejo Medical Center
3. If the closest STEMI Receiving Center is not available the patient shall be taken to the next closest appropriate STEMI receiving center.

D. Destination For Suspected Stroke Patients

1. Suspected stroke patients shall be transported to the closest Stroke Receiving Center.
2. Approved Stroke Receiving Centers:
  - a. Adventist Medical Center St. Helena.
  - b. Queen of the Valley Medical Center.
  - c. Kaiser Permanente Vallejo Medical Center.
  - d. Sutter Solano Medical Center.
3. If the closest Stroke Receiving Center is not available, the patient shall be taken to the next closest appropriate Stroke Receiving Center.

E. Destination For Major Trauma Patients

1. Major trauma patients (e.g. those patients meeting trauma triage criteria) shall be transported as follows:
  - a. Less than (<) sixty (60) minutes transport time to a trauma center - patients shall be transported to the closest appropriate trauma center.
  - b. Greater than (≥) sixty (60) minutes transport time from a trauma center - patients may be transported either to the closest hospital with an emergency department (ED) or directly to the closest appropriate trauma center upon base hospital physician direction.
  - c. Special consideration for safety and timeliness of transport should be exercised when utilizing an EMS aircraft within urban density areas located within the Napa County EMS system.
2. Notwithstanding the above, patients with the following conditions shall be transported to the closest appropriate emergency department:
  - a. Pulseless, non-breathing following trauma.
  - b. Unstable or unmanageable airway.
  - c. Overall transport time to trauma center greater than (≥) sixty (60) minutes - may be waived upon direct order of base hospital physician.
  - d. Base hospital physician order.
3. Approved Napa County Trauma Center
  - a. Queen of the Valley Medical Center (Level III Trauma Center) - capable of receiving all trauma with 24/7 neurosurgical capabilities (Helipad On-Site).

#### F. Destination For Pediatric Trauma Patients

1. Pediatric patients (less than [ $<$ ] fifteen [15] years of age) who meet trauma triage criteria should be transported by EMS helicopter to UCSF Benioff Children's Hospital Oakland (CHO) or UC Davis Medical Center (UCD) with the following exceptions:
  - a. EMS may consider ground transport to a pediatric trauma center if ground transport time is less than ( $\leq$ ) sixty (60) minutes.
2. When utilizing a hospital helipad provide appropriate notification, consistent with [Administrative Policy 105, EMS Aircraft.](#)
3. Notwithstanding the above, pediatric patients with the following conditions shall be transported to the closest appropriate emergency department:
  - a. Pulseless, non-breathing following trauma.
  - b. Unstable or unmanageable airway.
  - c. Uncontrollable hemorrhage.
  - d. Overall transport time to pediatric trauma center greater than sixty ( $>60$ ) minutes may be waived upon direct order of base hospital physician.
  - e. Base hospital physician order.

#### G. Destination For Burn Patients

1. Consider direct transport to UC Davis Medical Center (UCD) for major / critical burns.
2. Base hospital contact is required in these instances.
3. EMS Aircraft should be considered.

#### H. Destination For Obstetrical Patients

1. A patient is considered "obstetric" if pregnancy is estimated to be twenty (20) weeks or greater.
2. Obstetric patients should be transported to a hospital with in-patient obstetrical services in the following circumstances:
  - a. Patients in labor.
  - b. Patients whose chief complaint appears to be related to the pregnancy, or who potentially have complications related to the pregnancy.
  - c. Injured patients who do not meet trauma criteria.
3. Obstetric patients with unstable conditions where imminent treatment appears necessary to preserve the birthing parent or child's life should be transported to the nearest basic ED.
4. Stable obstetric patients should be transported to the ED of choice if their complaints are unrelated to the pregnancy.

#### I. Destination for patients with a suspected emerging infectious disease, e.g., Ebola

1. Coordinate with the base hospital and the EMS Duty Officer
2. Transportation and destinations will be determined in accordance with the CA Mutual Aid Region II Emerging Infectious Disease Transportation Plan.

POLICY	J. Destination for suspected Sexual Assault patients		
	<div>1. Transport the patient to patient to a receiving centers with sexual assault evidence exam capabilities when:<div>a. The sexual assault occurred in <math>\leq 14</math> days</div></div> <div>2. Approved receiving centers with sexual assault evidence exam capabilities<div>a. Adventist Medical Center St. Helena.</div><div>b. Queen of the Valley Medical Center.</div><div>c. Kaiser Permanente Vallejo Medical Center</div></div>		
OTHER REGIONAL TRAUMA CENTERS	Facility Name	Trauma Center Level	Helipad
	Santa Rosa Memorial (SRMH)	Level II	Yes
	North Bay Medical Center (NBMC)	Level III	Yes
	Kaiser Permanente Vacaville Medical Center (KVV)	Level II	Yes
	John Muir Medical Center, Walnut Creek (JMMC)	Level II	Yes
	Marin General Hospital (MGH)	Level III	No
	San Francisco General (SFG)	Level I	No
	UC Davis Medical Center (UCD)	Level I Adult/Pediatric	Yes
	Sutter Eden Hospital (Eden)	Level II	Yes
	Highland Medical Center (Highland)	Level II	No
	UCSF Benioff Children's Hospital Oakland (CHO)	Level I Pediatric	Yes

# **Attachment 1B:**

## **M-19 Stroke/CVA/TIA**



# Stroke/CVA/TIA

INDICATION	<ul style="list-style-type: none"> <li>Signs and symptoms consistent with a stroke.</li> </ul>	
	<ul style="list-style-type: none"> <li>Follow <a href="#">General Medical Care M-01</a>.</li> <li>If blood glucose &lt; 60 mg/dL, refer to <a href="#">Altered Mental Status M-05</a>.</li> <li>Perform Cincinnati Stroke Scale, visual field assessment and finger-to-nose test</li> </ul>	
BLS	<b>CINCINNATI PREHOSPITAL STROKE SCALE</b>	
	<b>Facial Droop</b>	Ask patient to smile or grimace. Symmetrical smile or face is normal. Asymmetry is abnormal.
	<b>Arm Drift</b>	Have the person close their eyes and hold their arms straight out in front for about 10 seconds. If both arms stay still or move equally, this is normal. If one arm does not move, or one arm drifts down more than the other, this is abnormal.
	<b>Speech Abnormalities</b>	Have the person say, "The sky is blue in Cincinnati," or some other simple, familiar saying. If the person slurs the words, gets some words wrong, or is unable to speak, this is abnormal.
	<b>VISUAL FIELDS/CEREBRAL FUNCTION EVALUATION</b>	
	<b>Visual Fields</b>	<ul style="list-style-type: none"> <li>Face the patient</li> <li>Ask the patient to look straight ahead or at your nose.</li> <li>Move your fingers in each of four visual field quadrants (upper right, upper left, lower right, lower left)</li> <li>Ask the patient to point to the side that they see the fingers moving.</li> <li>If you are moving your fingers and they do not see one side (e.g., upper right), test again on the same side but opposite quadrant (e.g., lower right).</li> <li>Note any field without vision</li> </ul>
	<b>Finger-to-Nose test</b>	<ul style="list-style-type: none"> <li>Patient holds arms at their shoulder to 90 degrees with elbows flexed to 90 degrees</li> <li>Place your index finger at various locations in front of the patient at a distance that requires patient to extend their elbow to reach your finger</li> <li>Ask patient to use their index finger on one hand to touch their index finger to your finger, then touch their index finger to their own nose, then to your finger</li> <li>Repeat several times with the examiner moving their target finger each time</li> <li>Patient repeats the process using the opposite hand's index finger</li> </ul>



BLS	<ul style="list-style-type: none"> <li>• If any one of these tests is abnormal and is a new finding, this may indicate an acute stroke and the following action should occur:             <ul style="list-style-type: none"> <li>• Identify and Document Time Last Known Well and Time of Symptom Discovery (Clock Time)</li> <li>• Last Known Well <math>\leq</math> 4 hours? – Yes                 <ul style="list-style-type: none"> <li>• Emergent transport to the closest designated Stroke Receiving Center</li> <li>• Declare “STROKE ALERT” to the receiving center.                     <ul style="list-style-type: none"> <li>• Include the LKWT</li> </ul> </li> <li>• Document “STROKE ALERT” in the PCR.</li> <li>• Document family/historian contact information or encourage them to accompany patient.</li> </ul> </li> <li>• Last Known Well &lt; 24 hours and &gt; 4 hours? – Yes                 <ul style="list-style-type: none"> <li>• Non-emergent transport to a designated Stroke Receiving Center of the patient’s choice</li> <li>• Declare “Extended STROKE ALERT” to the receiving center.                     <ul style="list-style-type: none"> <li>• Include the LKWT</li> </ul> </li> <li>• Document “STROKE ALERT” in the PCR.</li> <li>• Document family/historian contact information in the PCR or encourage the family/historian to accompany patient.</li> </ul> </li> </ul> </li> <li>• Document and report use of anticoagulants (e.g. Coumadin (warfarin), Pradaxa (dabigatran), Xarelto (rivaroxaban), Eliquis (apixaban), Lovenox (enoxaparin), Arixtra (fondaparinux).</li> </ul>
ALS	<ul style="list-style-type: none"> <li>• All specific ALS treatment is identified in <a href="#">General Medical Care M-01</a>.</li> </ul>
KEY CONCEPTS	<ul style="list-style-type: none"> <li>• Signs and symptoms of stroke include:             <ul style="list-style-type: none"> <li>• Altered mental status</li> <li>• Weakness or paralysis</li> <li>• Visual disturbance</li> <li>• Sensory loss</li> <li>• Aphasia or dysarthria</li> <li>• Syncope</li> <li>• Dizziness/Vertigo</li> <li>• Nausea/Vomiting</li> <li>• Headache</li> <li>• Seizure</li> <li>• Respiratory pattern change</li> <li>• Hypertension/hypotension</li> </ul> </li> <li>• With suspected stroke, when possible, bring a family member or other on-scene historian to the receiving facility.</li> <li>• If exact time of onset of symptoms is unclear, use last time patient known to be at baseline for time of onset.</li> <li>• EMS personnel should initiate rapid transport if the interval from the onset of Stroke symptoms to arrival at receiving facility will be 4 hours or less.</li> </ul>

# **Attachment 1C:**

## **502 Hospital Notification**



# Hospital Notification

EMS ADMINISTRATION 502

PURPOSE	<p>I. To outline communication responsibilities when a patient is transported from the field to a receiving facility and to identify what should be done when communication is disrupted.</p>
POLICY	<p><b>I. RECEIVING FACILITY NOTIFICATION</b></p> <p>A. The receiving facility will be notified, by the ambulance crew, that a patient(s) is enroute to their facility, via ambulance, unless communication has been established with a base hospital, and the base hospital has been requested to contact the receiving facility.</p> <p>B. Basic Hospital Notification Information:</p> <ol style="list-style-type: none"><li>1. Unit ID</li><li>2. ETA</li><li>3. Patient profile (age, gender, weight)</li><li>4. Chief Complaint</li><li>5. Treatment and response to treatment</li></ol> <p><b>II. AMBULANCE COMMUNICATIONS</b></p> <p>A. When communication with a base hospital has not been established, the ambulance will notify the receiving facility.</p> <p>B. Each receiving facility shall have a dedicated phone line and Med Net located at an area which is designated for ambulance communication.</p> <ol style="list-style-type: none"><li>1. The phone line is to be used only to receive communications from EMS units.</li><li>2. Communications via landline will conform to the same policies and procedures that govern ambulance communications via radio communication.</li><li>3. Each ambulance will maintain a list of the dedicated landline telephone numbers for each receiving facility.</li></ol> <p><b>III. RADIO LOG</b></p> <p>A. Each receiving facility will continuously maintain a log book at the area designated for ambulance communication.</p> <p>B. Legal Document: This log is a medical legal document and will be retained at the receiving facility for seven (7) years.</p> <p>C. Contents: All communications by time in chronological order. This will include a brief description of all communications received or transmitted (e.g., patient cases, daily radio tests).</p> <p>D. Notation of patient cases within the radio log will include, at a minimum:</p> <ol style="list-style-type: none"><li>1. "Event Number" assigned to the EMS call</li><li>2. Patient's chief complaint/problem.</li><li>3. Name of Radio Nurse who received the call</li><li>4. Pertinent comments</li></ol>

#### IV. SPECIALTY CARE CENTER ALERTS

- A. When a prehospital patient requires care from a Specialty Care Center, early notification is in the best interest of the patient and shall be performed and documented on PCR/ePCR.
- B. STEMI Alert:
  - 1. Basic Hospital Notification Information
  - 2. 12-Lead ECG indicates STEMI or suspected STEMI
- C. Stroke Alert
  - 1. Basic Hospital Notification Information
  - 2. Last Known Well Time
- D. Trauma Alert
  - 1. Basic Hospital Notification Information
  - 2. Mechanism
  - 3. Injuries
  - 4. Vital Signs

#### V. DISRUPTED BASE HOSPITAL COMMUNICATION

- A. When a paramedic is directed by a field treatment guideline to contact the Base Hospital and he/she is unable to establish or maintain contact and determines that a delay in treatment may jeopardize the patient, the paramedic may initiate indicated ALS care as specified in the Field Treatment Guidelines until Base Hospital contact can be established or until the patient is delivered to the closest appropriate receiving hospital. The paramedic shall transport the patient as soon as possible while providing necessary treatment enroute.
- B. If ALS procedures normally requiring Base Hospital contact are performed under disrupted communications, the paramedic shall:
  - 1. Immediately following delivery of the patient to the receiving hospital:
    - a. Complete the ePCR documenting the ALS skills performed;
    - b. Notify Napa Central Dispatch of the communication problem, if the paramedic suspects that any radio problem was due to a situation other than geographical location.
  - 2. Within twenty-four (24) hours, send a copy of the completed PCR/ePCR and a written report explaining the reason(s) or suspected reason(s) for communication failure to the paramedic provider agency EMS Coordinator. The paramedic shall be prepared to demonstrate that the treatment delivered was appropriate.

# **Attachment 1D:**

## **504 Inter-Facility Transfer**



## Inter-Facility Transfers

EMS ADMINISTRATION 504

PURPOSE	<ul style="list-style-type: none"><li>I. To outline the responsibility of the hospitals in the Napa County EMS system to provide emergency medical services and to assure that patients requiring transfer to another facility, for any reason, will be transferred safely and without delay.</li><li>II. Hospitals and transport providers within the Napa County EMS system shall adhere to any and all standards set forth here when transferring a patient to another facility.</li></ul>
POLICY	<ul style="list-style-type: none"><li><b>I. BASIC RESPONSIBILITIES FOR TRANSFER</b><ul style="list-style-type: none"><li>A. A variety of reasons may exist for the transfer of a patient to another hospital or health facility including:<ul style="list-style-type: none"><li>1. Needed services not available at the transferring facility;</li><li>2. A shortage of needed beds at the transferring facility;</li><li>3. Patient request;</li><li>4. Patient repatriation;</li><li>5. Patient needing a lower level of care.</li></ul></li><li>B. Hospitals licensed to provide emergency services must fulfill their obligation under the California Health and Safety Code to provide emergency treatment to all patients regardless of their ability to pay. Transfers made for reasons other than immediate medical necessity must be evaluated to assure that the patient can be safely transferred without medical hazard to the patient's health and without decreasing the patient's chances for or delaying a full recovery. In these cases, physicians and hospitals should take a generally conservative view, deciding in favor of patient safety.</li><li>C. Patient transfers involve the following physician and hospital responsibilities:<ul style="list-style-type: none"><li>1. Each hospital is expected to process all transfers in accordance with Title 22 of the California Code of Regulations, Chapter 1240 of the 1987-88 California Legislative Session, the Joint Commission on Accreditation of Hospital Standards, the OSHA Consent Manual and those conditions specified by these transfer guidelines.</li><li>2. Each hospital shall have its own written transfer policy clearly establishing administrative and professional responsibilities.</li><li>3. Transfer agreements must also be negotiated and signed with hospitals that have specialized services not available at the transferring facility. In addition, hospitals seeking consent to transfer patients to county hospitals shall execute formal transfer agreements implementing these guidelines.</li></ul></li><li>D. All hospitals with basic emergency room permits must maintain a roster of specialty physicians available for consultation at all times. Hospitals shall ensure that physician specialists or services are available for the treatment of emergency patients regardless of ability to pay.</li><li>E. All hospitals with stand by emergency room permits must have transfer agreements with other hospitals that maintain a roster of specialty physicians available for consultation at all times.</li></ul></li></ul>

- F. Notwithstanding, the fact that the receiving facility or physicians at the receiving facility have consented to the patient transfer, the transferring physician and facility have responsibility for the patient until arrival at the receiving hospital. The transferring physician, in consultation with the receiving physician, decides what professional medical assistance should be provided for the patient during the transfer.
- G. The transferring physician has a responsibility to candidly and completely inform the receiving physician of the patient's condition so that the receiving physician can make suitable arrangements to receive the patient.
- H. A hospital shall not accept a patient in transfer when the appropriate level of care cannot be provided.

## II. TRANSFER STANDARDS

- A. Patient Safety - Physicians considering patient transfer should exercise conservative judgment, always deciding in favor of patient safety.
- B. Emergency Care - If the patient presents themselves to an emergency room, the transferring physician or other appropriate medical personnel operating under a physician's direction, must examine and evaluate the patient to determine if the patient has an emergency medical condition or is in active labor and if so, perform emergency care and emergency services until a transfer can be arranged to an appropriate facilities where services and qualified personnel are available.
- C. Emergency Medical Condition - The term "emergency medical condition" means a medical condition manifesting itself by acute symptoms of sufficient severity (including severe pain) such that the absence of immediate medical attention could reasonably be expected to result in
  - 1. Placing the patient's health in serious jeopardy;
  - 2. Serious impairment to bodily functions, or
  - 3. Serious dysfunction of any body organ or part; or
  - 4. Potential for death.
- D. Active Labor - The term "active labor" means labor at a time at which:
  - 1. There is inadequate time to safe transfer to another hospital prior to delivery; or
  - 2. A transfer may pose a threat to the health and safety of the patient or unborn child.
- E. Unavailability of Services - Facilities and personnel for emergency care and emergency services shall be consistently available to patients regardless of ability to pay. If, however, a transferring physician is, for whatever reason, faced with the unavailability of needed emergency facilities and/or personnel and therefore a greater risk exists to the patient if there is no transfer, then the transferring physician may initiate transfer and the receiving physician may accept the transfer.
- F. Consent of Receiving Physician - No transfer shall be made without the consent of the receiving physician and confirmation by the receiving hospital that the patient meets the hospital's admissions criteria relating to appropriate bed, personnel and equipment necessary to treat the patient.

- G. Medical Fitness of Patient - For all other circumstances except those outlined above, the transferring physician must determine whether the patient is medically fit to transfer. This determination may include but should not be limited to:
1. Establishing and assuring an adequate airway and adequate ventilation;
  2. Initiating control of hemorrhage;
  3. Stabilizing and splinting the spine or fractures;
  4. Establishing access routes for fluid administration as needed;
  5. Initiating fluid and/or blood replacement as needed;
  6. Determining that the patient's vital signs (including blood pressure, pulse, respirations as indicated) are sufficient to sustain adequate perfusion. The vital signs should remain within these parameters for a reasonable period of time prior to transfer;
  7. Determining that the patient has a stable level of consciousness for a reasonable period of time prior to transfer;
  8. Providing that patient receives cardiac monitoring, if appropriate; and
  9. In the case of pregnancy, determining with reasonable certainty that delivery will not occur during the expected duration of transfer and that neither the birthing parent nor fetus show any signs of distress.
- H. Advisement of Patient - The patient or the patient's legal representative must be advised, if possible, of the need for the transfer and the alternatives, if any, to the transfer as well as adequate information regarding the proposed transportation plans and the benefits and risks, if any, of the proposed transfer.
- I. Patient Needs - Once the decision to transfer the patient has been reached, every effort should be made to transfer as rapidly and safely as possible. The transferring physician must take into account the needs of the patient during transport and the ability of the transport personnel to care for the patient.
- J. Scope of Practice of Transport Personnel - Transport personnel are not authorized and will not provide services beyond their scope of practice. Should services beyond scope be required, a person qualified in its performance shall accompany the patient during transport.

### **III. TRANSFER PROCEDURES FOR PATIENTS WITH DNR ORDERS**

- A. Patients who are being transferred with Do Not Resuscitate (DNR) orders shall also have orders to the effect of the destination of the patient in the case of death during transfer. Options for destination include the patient's intended receiving facility (e.g. home, skilled nursing home, hospital), pre-determined funeral home or the coroner's office.
- B. It shall be the responsibility of the transferring facility and the provider of the transport to ensure that these arrangements have been made prior to the initiation of the transfer.

### **IV. EXCEPTIONS TO TRANSFER PROCEDURE**

- A. If an Advanced Life Support (ALS) transfer unit is unavailable, the transferring physician may request a Basic Life Support (BLS) unit staffed with at least one (1) Registered Nurse (RN) and appropriate equipment.



**V. PREARRANGED TRANSFER AGREEMENTS**

- A. Inter-facility transfers shall be accomplished by prearranged transfer agreements between the transferring and receiving hospitals and transport shall be performed by an ALS ambulance, BLS ambulance, wheelchair / gurney car in accordance with this policy. The designated ALS transfer units shall be ALS equipped and staffed to the level required of ALS emergency response ambulances in Response and Transportation Section of Napa County EMSA policy manual. If patient transport needs exceed the paramedic scope of practice, then the transferring physician will order a critical care or emergency care level Registered Nurse and any other personnel, equipment or supplies necessary for patient care.

**VI. ADDITIONAL REQUIREMENTS FOR TRANSFER FOR NON-MEDICAL REASONS**

- A. When patients are transferred for non-medical reasons such as an inability to pay; the transferring hospital must follow all of the above requirements. In particular, the transferring physician must ensure that emergency care and emergency services have been provided and shall determine that the transfer would not create a medical hazard to the patient and would not decrease that patient's chances for or delay the patient's full recovery. The transferring physician must verify these determinations on the patient transfer form. The transferring physician must still arrange for an accepting physician at the receiving facility.

**VII. SCOPE**

- A. This policy addresses the inter-facility transfer of patients accompanied by prehospital care personnel. This policy applies to transfers originating at a facility in Napa County with destination within or out of the same region. The EMTs and paramedics may perform any activity identified in their scope of practice, California Administrative Code, Title 22, Division 9, which has been approved by their local EMS Agency.

**VIII. TRANSFER DETERMINATION**

- A. Attending physician makes a determination that an inter-facility transfer is needed and the level of transfer care required, as defined in "Guidelines for Determining Level of Transfer" following:
  - 1. Receiving physician and facility agree to accept patient.
  - 2. Transferring facility requests appropriate level transfer unit from an EMS provider unless agreed between transferring and receiving facility that receiving facility is to make arrangement.
  - 3. Transferring facility will advise EMS provider of the following:
    - a. Patient's name.
    - b. Diagnosis/level of acuity.
    - c. Destination.
    - d. Transfer date and time.
    - e. Unit transferring patient.
    - f. Level of transfer requested.
    - g. Sending/receiving doctor's name.
    - h. Treatment received.
    - i. History, medication, allergies and orders.
    - j. Special equipment with patient.

4. If patient requires a ventilator, respirator or in situations where additional airway management may be advantageous, a respiratory therapist or R.N. will accompany patient to assist in airway management.
5. The EMS provider agrees to accept the transfer based on reported information and advises ETA of transfer unit.
6. The transfer unit notifies their operational area dispatch of destination per county protocol.

#### IX. GUIDELINES FOR DETERMINING LEVEL OF TRANSFER

Basic Life Support	<ul style="list-style-type: none"> <li>• EMT staffed transfer by BLS ambulance</li> </ul>
Advanced Life Support	<ul style="list-style-type: none"> <li>• Paramedic staffed transfer on ALS equipped ambulance</li> </ul>
RN (CCT/Air Ambulance)	<ul style="list-style-type: none"> <li>• R.N. (s) in attendance on ALS equipped ambulance with additional staff as appropriate (EMT, Paramedic)</li> </ul>
Physician	<ul style="list-style-type: none"> <li>• Physician in attendance on ALS equipped unit with additional staff as appropriate (EMT, Paramedic, R.N.)</li> </ul>

#### POLICY

Determination of level of transfer required. (X=Minimum level of service required)	BLS	ALS	CCT/RN	MD/DO
Vital signs stable	X			
Oxygen by mask or cannula	X			
Level of consciousness stable	X			
Patients with nasogastric (NG) tubes or gastrostomy tubes	X			
Patients with heparin locks	X			
Patients with tracheostomy tubes	X			
Patient's with Foley catheters	X			
Physical restraints	X			
Monitor IV lines delivering glucose solutions, isotonic balanced salt solutions including Ringer's lactate.	X			
IV fluids running (no additives)	X			
Continuous respiratory assistance needed (including ventilations or use of ventilators) Respiratory Therapist or RN			X	
Continuous positive airway pressure (CPAP)		X		
Bi-level positive airway pressure (BiPAP)			X	
Peripheral IV medications running or anticipated (refer to following chart)				
Pain medication administration – ≥ 15 years (Fentanyl or Acetaminophen only)		X		
Pain medication administration – ≤ 15 years (Fentanyl only)		X		

IV medications outside county protocols running or anticipated			X	
Central IV line in use	X			
PA line in use			X	
Arterial line in place			X	
Temporary pacemaker in place			X	
ICP line in place			X	
IABP in place			X	
Chest tube – monitor previously established		X		
ECG monitoring, defibrillation, synchronized cardioversion, and external cardiac pacing		X		
Neonatal transport			X	
ALS providers are approved to <b>administer</b> and <b>monitor</b> the below medications consistent with the route and indication identified on the Napa County EMS adult and pediatric medication lists.				
Acetaminophen (≥15 years only)		X		
Adenosine		X		
Albuterol		X		
Amiodarone		X		
Aspirin (≥15 years only)		X		
Atropine Sulfate		X		
Calcium Chloride		X		
Dextrose		X		
Diphenhydramine		X		
Epinephrine		X		
Fentanyl		X		
Hydroxocobalamin (≥15 years only)		X		
Ipratropium		X		
Lidocaine		X		
Midazolam		X		
Naloxone		X		
Nitroglycerin (≥15 years only)		X		
Ondansetron		X		
Sodium Bicarb		X		
Tranexamic Acid (≥15 years only)		X		

POLICY	ALS providers are approved to <b>monitor</b> the below medications			
	Morphine Sulphate ≤ 40 mEq (≥15 years only)		<b>X</b>	
	Potassium Chloride ≤ 40 mEq (≥15 years only)		<b>X</b>	
<p><b>X. COMMUNICATION</b></p> <ul style="list-style-type: none"> <li>A. Transport personnel shall receive appropriate patient status report from transferring physician and/or R.N.</li> <li>B. The paramedic shall receive the transferring orders from the transferring physician prior to leaving the hospital, including a telephone number where the transferring physician can be reached during the patient transport.</li> <li>C. Copies of all pertinent medical records, lab reports, x-rays and transfer forms accompany patient to receiving facility.</li> <li>D. Transport personnel shall receive the patient's report and confirm appropriate level of care for transfer. If transport personnel and transferring physician are unable to agree, they will confer with the base hospital physician.</li> <li>E. All levels of transfer will have a patient care record completed by the transport personnel.</li> </ul> <p><b>XI. TRANSFER SUMMARY</b></p> <ul style="list-style-type: none"> <li>A. The records transferred with the patient shall include a "transfer summary" signed by the transferring physician which contains relevant transfer information. The form of the "transfer summary" shall, at a minimum, contain the patient's name, address, sex, race, age and medical condition; the name and address of the transferring doctor or emergency department personnel authorizing the transfer; the time and date the patient was first presented at the transferring hospital; the name of the physician at the receiving hospital consenting to the transfer and the time and date of the consent; the time and date of the transfer; the reason for the transfer; and the declaration of the signor that the signor is assured, within reasonable medical probability, that the benefits of the transfer outweigh any medical risk to the patient.</li> <li>B. Neither the transferring physician nor transferring hospital shall be required to duplicate in the "transfer summary" information contained in medical records transferred with the patient. In addition, the "transfer summary" shall include any other information pertinent to patient care as outlined in this policy.</li> <li>C. Monitor, maintain and adjust as necessary to maintain a preset rate of flow and/or turn off the flow of intravenous fluid.</li> <li>D. Transfer a patient, who is deemed appropriate for transfer by the transferring physician and who has nasogastric (NG) tubes, gastrostomy tubes, heparin locks, foley catheters, tracheostomy tubes and/or indwelling vascular access lines, excluding arterial lines.</li> </ul>				

# **Attachment 1E:**

## **Cardiovascular Systems of Care Charter**



# Cardiovascular Systems of Care (C-SOC)

## I. PURPOSE

To establish a system-wide Cardiovascular Systems of Care meeting, for evaluating the Napa County EMS Stroke, STEMI, and Cardiac Arrest Systems, in order to foster continuous improvement in performance and patient care. C-SOC will also assist the Napa County EMS Agency in defining standards; evaluating methodologies, and utilizing the evaluation results for continued system improvement.

## II. DEFINITION

"Cardiovascular Systems of Care": A multi-disciplinary group, advisory to the EMS Medical Director, whose purpose is to review Stroke, STEMI, and Cardiac Arrest. It is comprised of designated representatives from the EMS Agency, designated in-county and out-of-county receiving centers, and ALS provider agencies. This is a closed meeting.

## III. CARDIOVASCULAR SYSTEMS OF CARE

- A. The C-SOC process provides review of Stroke data for each receiving center. Data measures are aligned with Get With The Guidelines.
- B. The C-SOC process provides review of STEMI data for each receiving center. Data measures are aligned with the American Heart Association.
- C. The C-SOC process provides review of Sudden Cardiac Arrest for each prehospital provider. Data measures are aligned with My Cares Registry and the current AHA guidelines.
  1. Cardiac Arrest data is limited to cases of presumed cardiac etiology, excluding the following:
    - a. Trauma
    - b. Asphyxia
    - c. Drowning/Submersion
    - d. Electrocution
    - e. Exsanguination/Hemorrhage
    - f. Drug Overdose
- D. Confidentiality:
  1. The proceedings and records of this committee are confidential and are protected under section 1157.7 of the Evidence Code, State of California. Members and invited guests of C-SOC, as a condition of attendance, are required to sign a Confidentiality Agreement, which is maintained on file at the EMS agency.
  2. Because of the confidentiality requirements, C-SOC meetings are closed and participants must be included by position as identified in this policy.
  3. Attendees shall not divulge or discuss information that would have been obtained solely through a C-SOC invitation.
  4. To maintain confidentiality, minutes and correspondence of C-SOC are stored in secure files at the Napa County EMS Agency. After review, all paperwork will be disposed of in an appropriate confidential manner.

E. C-SOC Participants

1. Napa County EMS Medical Director
2. Napa County EMS Agency Administrator
3. Napa County EMS Agency Specialist
4. Stroke, STEMI, Base Coordinators and Directors from Queen of the Valley Medical Center
5. STEMI Coordinator and Director from St. Helena Hospital
6. STEMI and Stroke Coordinators and Directors from Kaiser Vallejo
7. Stroke Coordinator and Director from Sutter Solano
8. ALS Prehospital QI Coordinators or representative
9. EMT/Paramedic Provider Representatives

F. C-SOC Process

1. Scope of Review: The review conducted by the group includes patient care in Napa County and the patients transported to designated out-of-county hospitals. The receiving hospitals shall submit quarterly data to the EMS agency two weeks prior to each meeting date. A representative from each hospital or provider will present on their data. The EMS agency will make advance notification for providers/hospitals presenting a case review. The meeting structure is limited to:
  - a. Stroke Activations
    - i. Queen of the Valley, Sutter Solano, Kaiser Vallejo
  - b. STEMI Activations
    - i. Queen of the Valley, St. Helena, Kaiser Vallejo
  - c. Sudden Cardiac Arrest
    - i. AMR, American Canyon FD, Napa FD, Queen of the Valley, St. Helena
2. The EMS Agency Provides:
  - a. Staff support for documentation (minutes) of meetings.
  - b. Maintenance of records of proceedings.
  - c. Data analysis of provided metrics
  - d. Design for system improvement

# **Attachment 1 F:**

## **Tri-fold Cards**



## Automated External Defibrillator (AED)

These can provide an electrical shock to the heart during cardiac arrest. They are located in businesses, schools, and public areas, etc. See if you can find one!



**Using an AED is easy**



Power on

Follow the prompts



Cardiac Arrest



Heart Attack



Stroke

**Don't wait. Act in time.  
Call 9-1-1**

*Know how to identify a medical emergency*

# Act In Time



**Providence**  
Queen of the Valley  
Medical Center



# Cardiac Arrest

*When someone collapses and is not breathing normally...*

*Act in Time!*



**Call  
9-1-1**



**Push hard and  
fast in the center  
of the chest**



**Use an AED if  
available**



**Do NOT drive  
to the hospital.**

**Call 9-1-1.**

# Heart Attack

*Call 9-1-1 when someone experiences...*

*Act in Time!*

**Chest pain or discomfort**

**Shortness of breath**

**Arm, back, neck, or jaw pain**

**Nausea, lightheaded, or unusually tired**

**Women Men**



# Stroke

*B.E.F.A.S.T. when someone experiences signs of a stroke...*

*Act in Time!*

**Balance**

**Eyes**

**Face**

**Arm**

**Speech**

**Time**



**Loss of  
balance or  
dizziness**



**Vision loss  
or double  
vision**



**Facial  
droop**



**Arm or leg  
weakness**



**Difficulty  
speaking**



**Time to  
call 9-1-1**

## Desfibrilador Externo Automático (DEA)

Estos dan una descarga eléctrica al corazón durante un paro cardíaco. Están ubicados en negocios, escuelas y áreas públicas, etc. ¡Vea si puede encontrar uno!



**¡Usar un DEA es fácil!**

⦿ Encienda

🔊 Siga las indicaciones



Paro Cardíaco



Ataque Al Corazón



Derrame Cerebral

**No espere. Actúe a tiempo.  
Llame al 9-1-1**

*Sepa como identificar una emergencia médica*

# Actúe A Tiempo



# Paro Cardíaco

Cuando alguien se desmaya y no respira normalmente...

¡Actúe a tiempo!



Llame al  
9-1-1



¡Presione fuerte y  
rápido en el  
centro del pecho!



Use y DEA si  
está  
disponible

# Ataque Al Corazón

Llame al 9-1-1 cuando alguien tenga...



NO conduzca  
al hospital.

Llame al 9-1-1.

¡Actúe a  
tiempo!

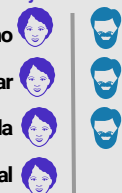
Dolor o molestia en el pecho

Dificultad para respirar

Dolor de brazo, espalda, cuello o mandíbula

Náuseas, mareos o cansancio inusual

Mujeres Hombres



# Derrame Cerebral

R.Á.P.I.D.O. cuando alguien tiene signos de un derrame cerebral...

¡Actúe a  
tiempo!

R



Rostro  
con  
parálisis

Á



Alteración  
del  
equilibrio

P



Pérdida de  
fuerza en un  
brazo o pierna

I



Impedimento  
visual

D



Dificultad  
para  
hablar

O



¡Obtenga  
ayuda rápido,  
llame al 911!

## Automated External Defibrillator (AED)

These can provide an electrical shock to the heart during cardiac arrest. They are located in businesses, schools, and public areas, etc. See if you can find one!



**Using an AED is easy**



Power on



Follow the prompts



Cardiac Arrest



Heart Attack



Stroke

**Don't wait. Act in time.  
Call 9-1-1**

*Know how to identify a medical emergency*

# Act In Time



**AdventistHealth**  
St. Helena



# Cardiac Arrest

*When someone collapses and is not breathing normally...*

*Act in Time!*



**Call  
9-1-1**



**Push hard and  
fast in the center  
of the chest**



**Use an AED if  
available**



**Do NOT drive  
to the hospital.**

**Call 9-1-1.**

# Heart Attack

*Call 9-1-1 when someone experiences...*

*Act in Time!*

**Chest pain or discomfort**

**Women Men**



**Shortness of breath**



**Arm, back, neck, or jaw pain**



**Nausea, lightheaded, or unusually tired**



# Stroke

*B.E.F.A.S.T. when someone experiences signs of a stroke...*

*Act in Time!*

**Balance**



**Loss of  
balance or  
dizziness**

**Eyes**



**Vision loss  
or double  
vision**

**Face**



**Facial  
droop**

**Arm**



**Arm or leg  
weakness**

**Speech**



**Difficulty  
speaking**

**Time**



**Time to  
call 9-1-1**

## Desfibrilador Externo Automático (DEA)

Estos dan una descarga eléctrica al corazón durante un paro cardíaco. Están ubicados en negocios, escuelas y áreas públicas, etc. ¡Vea si puede encontrar uno!



**¡Usar un DEA es fácil!**

⦿ Encienda

🔊 Siga las indicaciones



Paro Cardíaco



Ataque Al Corazón



Derrame Cerebral

**No espere. Actúe a tiempo.  
Llame al 9-1-1**

*Sepa como identificar una emergencia médica*

# Actúe A Tiempo



**AdventistHealth**  
St. Helena



# Paro Cardíaco

Cuando alguien se desmaya y no respira normalmente...

¡Actúe a tiempo!



Llame al  
9-1-1



¡Presione fuerte y  
rápido en el  
centro del pecho!



Use y DEA si  
está  
disponible

# Ataque Al Corazón

Llame al 9-1-1 cuando alguien tenga...



NO conduzca  
al hospital.

Llame al 9-1-1.

¡Actúe a  
tiempo!

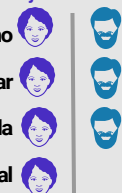
Dolor o molestia en el pecho

Dificultad para respirar

Dolor de brazo, espalda, cuello o mandíbula

Náuseas, mareos o cansancio inusual

Mujeres Hombres



# Derrame Cerebral

R.Á.P.I.D.O. cuando alguien tiene signos de un derrame cerebral...

¡Actúe a  
tiempo!

R



Rostro  
con  
parálisis

Á



Alteración  
del  
equilibrio

P



Pérdida de  
fuerza en un  
brazo o pierna

I



Impedimento  
visual

D



Dificultad  
para  
hablar

O



¡Obtenga  
ayuda rápido,  
llame al 911!