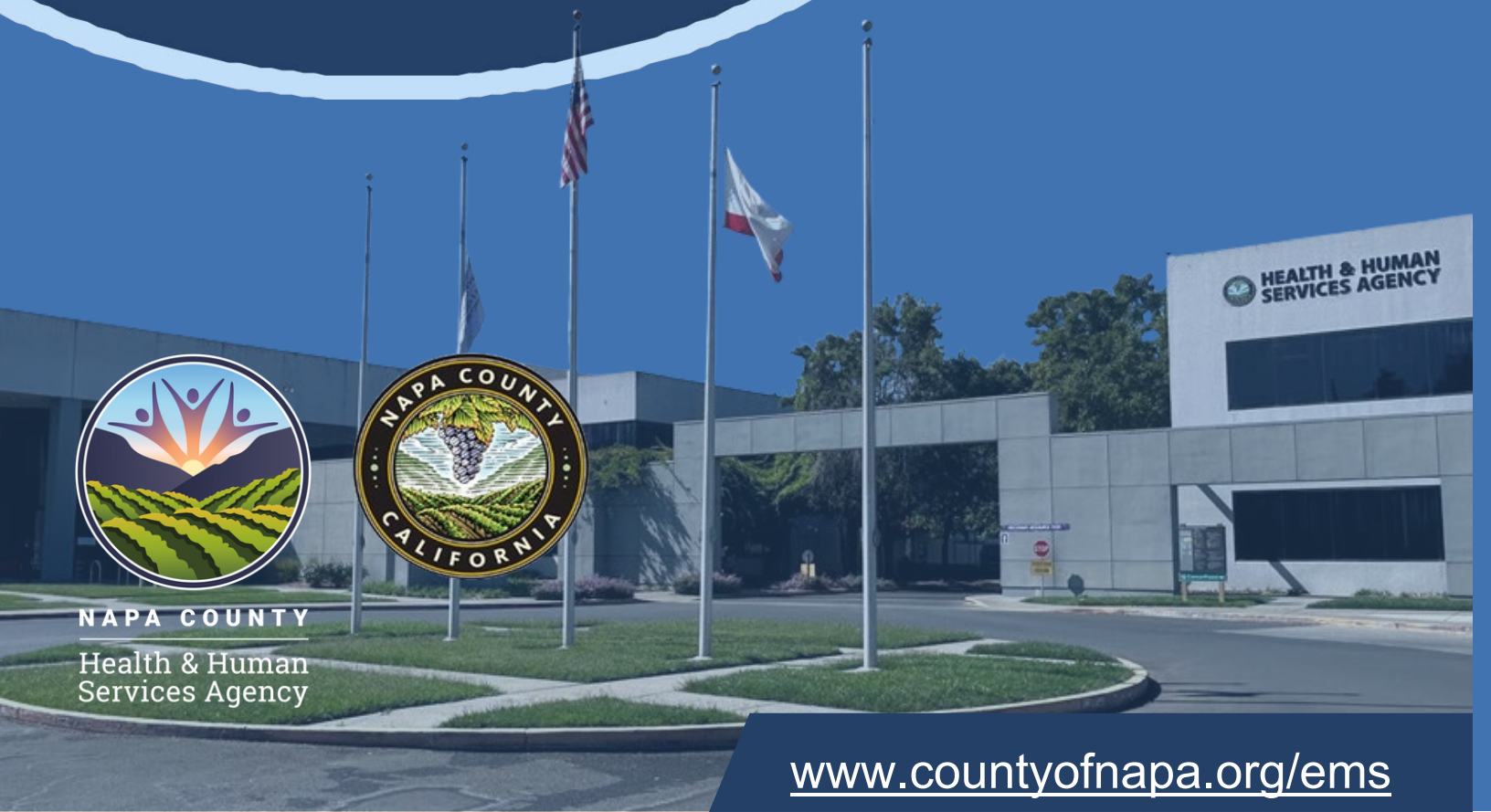
NAPA COUNTY

EMERGENCY MEDICAL SERVICES

APPENDIX 1

STEMI SYSTEM PLAN

2019 – 2024



NAPA COUNTY

Health & Human Services Agency

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.

Sincerely,

Angela Wise

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

Enclosure:
AW: rd

EMERGENCY MEDICAL SERVICES AUTHORITY
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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
Area/Subarea name	**EXCLUSIVITY**			**TYPE**			**LEVEL**						
Napa - Entire County		X	Competitive	X				X	X				X

INTRODUCTION

The Napa County Emergency Medical Services Agency's STEMI Critical Care System Plan has been written in accordance with Title 22, Division 9, Chapter 7.1 of the California Code of Regulations.

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

Napa County has two hospitals, Queen of the Valley Medical Center, and Adventist Health, St. Helena. Both facilities are EMS designated STEMI Receiving Centers. The Napa County EMS System averages approximately 57 "STEMI Alerts" by EMS annually, and around 30% of these patients receive percutaneous coronary intervention (PCI). 70% of all Napa County STEMI patients receiving thrombolytic treatment arrive via EMS, and the remaining 30% arrive as "walk-in" patients.

STEMI PROGRAM GOALS AND OBJECTIVES

- Objective #1: Maintain existing agreements with all Napa County STEMI Receiving Facilities
    - Process: Contract management with the EMS Administrator and hospital management
    - 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 cardiac health education/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 STEMIs by reducing door-to-balloon times
    - Process: Through the Cardiovascular Systems of Care (C-SOC) meeting
    - Timeline: Median door-to-balloon times measured bi-annually, ongoing

EMS AGENCY PERSONNEL WHO HAVE A ROLE IN A STEMI CRITICAL CARE SYSTEM:

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

STEMI DESIGNATED FACILITIES AND AGREEMENT EXPIRATION DATES:

- Providence, Queen of the Valley Medical Center – STEMI Receiving Center

    - STEMI agreement expiration date: June 30, 2027
- Adventist Health, St. Helena Hospital – STEMI Receiving Center
    - STEMI agreement expiration date: June 30, 2025

The Napa County EMS Agency has designated Queen of the Valley Medical Center and St. Helena Hospital as STEMI Receiving Centers. Kaiser Permanente Vallejo Medical Center is an approved out-of-county STEMI receiving center. There is no written agreement with this facility as they are the purview of the Solano County EMS Agency.

POLICIES RELATED TO STEMI PATIENT IDENTIFICATION AND DESTINATION POLICIES:

- See Attachment 1A. (501 Patient Destination)
- See Attachment 1B. (C-09 Suspected Acute Coronary Syndrome)

POLICY FOR FIELD COMMUNICATION TO THE RECEIVING HOSPITAL-SPECIFIC TO STEMI PATIENTS:

- See Attachment 1C. (502 Hospital Notification)

POLICY FOR INTER-FACILITY TRANSFER OF STEMI PATIENTS:

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

DATA COLLECTION:

The Napa County EMS Agency completes a 100% audit of all EMS initiated "STEMI Alerts," defined as pre-hospital provider confirming a STEMI or suspected STEMI 12-lead. The STEMI Alert reports are generated through the local ImageTrend data repository. Additionally, both ImageTrend and First Pass, an online clinical quality measurement tool, completes analytics for several of the pre-hospital STEMI data metrics listed below:

<u>Pre-Hospital STEMI Metrics</u>

- Scene time ≤ 10 min
- Median scene time
- Median transport time
- ASA administration
- "STEMI Alert" documented if 12-lead shows STEMI
- "STEMI Alert" documented for all confirmed STEMIs arriving by EMS
- Oxygen administered if SP02 is < 94%
- Destinations for EMS "STEMI Alerts"
- Appropriate triage of EMS "STEMI Alerts" to STEMI Receiving Centers
- 100% QA for confirmed STEMI cases.
- Each of the three approved STEMI Receiving Centers collect and submit the below data quarterly to the Napa County EMS Agency via spreadsheets. These data points and metrics are a combination of the California State regulation Chapter 6.2 ST-Elevation Myocardial Infarction Critical Care System and the American Heart Association Mission Lifeline Measures.

STEMI Receiving Center State Data Requirements:

- EMS ePCR Number
- Facility
- Name: Last, First
- Date of Birth
- Patient Age
- Patient Gender
- Patient Race
- Hospital Arrival Date
- Hospital Arrival Time
- Dispatch Date
- Dispatch Time
- Field ECG Performed
- 1st ECG Date
- 1st ECG Time
- Did the patient suffer out-of-hospital cardiac arrest
- CATH LAB Activated
- CATH LAB Activation Date
- CATH LAB Activation Time
- Did the patient go to the CATH LAB
- CATH LAB Arrival Date
- CATH LAB Arrival Time
- PCI Performed
- PCI Date
- PCI Time
- Fibrinolytic Infusion
- Fibrinolytic Infusion Date
- Fibrinolytic Infusion Time
- Transfer
- SRH ED Arrival Date
- SRH ED Arrival Time
- SRH ED Departure Date
- SRH ED Departure Time
- Hospital Discharge Date
- Patient Outcome
- Primary and Secondary Discharge Diagnosis
- Number of STEMIs treated.
- Number of STEMI patients transferred.
- Number and percent of emergency department STEMI patients arriving by private transport (non-EMS).
- The false positive rate of EMS diagnosis of STEMI, defined as the percentage of STEMI alerts by EMS which did not show STEMI on ECG reading by the emergency physician.

STEMI Receiving Center Metrics (as noted in the Napa County EMS Agency EQIP)

- Median Door to 1st EKG time
- Median 1st EKG to Cath Lab time

- Median Cath Lab to Balloon time
- Median Door to Balloon time
    - Disaggregated by method of arrival (EMS vs. Walk-in)
- % Door to Balloon is ≤ 90 min
- Median EMS to Balloon time
- Method of arrival
- Canceled EMS STEMI Alerts/False Positives
- Sex
- Race/Ethnicity
- Median Age

POLICY AND DESCRIPTION FOR USING OUT-OF-COUNTY STEMI RECEIVING CENTERS:

- See Attachment 1A. (501 Patient Destination)

Kaiser Permanente Vallejo Medical Center is a Napa County EMS Agency approved out-of-county STEMI receiving center. Additionally, Solano County EMS Agency designates this facility as a STEMI Receiving Center. Kaiser Permanente Vallejo Medical Center has a designated STEMI Program Manager and Director. The STEMI Program Manager submits the hospital STEMI data points, listed above, quarterly to the Napa County EMS Agency. Additionally, the STEMI 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.

STEMI QUALITY IMPROVEMENT COMMITTEE:

The Napa County EMS Agency hosts the Cardiovascular Systems of Care 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 care to offer high-level overview and drives system changes to improve the cardiac care of Napa County patients.

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

The Napa County EMS Agency completes a 100% audit of all EMS initiated "STEMI Alerts," defined as pre-hospital provider confirming a STEMI or Suspected STEMI 12-lead. The Napa County EMS Agency strives to offer real-time clinical feedback directly to the field providers.

PUBLIC EDUCATION SPECIFIC TO CARDIAC CARE:

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 heart attack symptoms and cardiac arrest. During these events, wallet sized tri-fold cards explaining when to call 9-1-1 and how to perform hands-only CPR are distributed in both English and Spanish. Additionally, each card has a Quick Response Code for the PulsePoint application allowing for easy smart phone registration.

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

The Queen's Heart Safe Committee created a coffee sleeve with a PulsePoint QR code to raise awareness for Sudden Cardiac Arrest Survival Month. These sleeves continue to be utilized at several coffee shops throughout Napa County during the month of October. Additionally, the Queen's Heart Safe Committee ran a PulsePoint advertisement before every film shown at a Napa County Drive-Thru theatre.

ANNUAL UPDATE:

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

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

- The Napa County EMS system continues to reach the outlined goals and objectives. We continue to engage with our STEMI Receiving Hospitals to reduce Door-to-Balloon times.

STEMI critical care system performance improvement activities:

- STEMI education review for all Napa County EMS providers during the annual policy update trainings, including minimizing scene time, and not repeating 12-leads on scene unnecessarily.
- Continued involvement in all pre-hospital and hospital STEMI meetings
- First Pass data program implemented to collect and analyze pre-hospital performance metrics

Attachment 1A:
501 Patient Destination

Patient Destination

EMS ADMINISTRATION 501

PURPOSE

I. To assist in determining the most appropriate receiving facility for patients transported as part of an EMS response.

POLICY

I. APPROVED EMS RECEIVING FACILITIES

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.

NOTE: 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.

B. Approved receiving facilities within Napa County include:

Facility Name	ED Status	Designations	Location
Adventist Medical Center St. Helena (SHH)	Stand-by	- STEMI - Stroke	10 Woodland Rd. St. Helena, CA 94574
Queen of the Valley Medical Center (QVMC)	Basic	- Base Hospital - STEMI - Stroke - Trauma – Level III - OB	1000 Trancas St. Napa, CA 94559

II. DESTINATION DETERMINATION

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.

B. The following factors may also be considered in determining patient destination:

1. Patient request.
2. Family request.
3. Patient's physician request or preference.

C. Destination For STEMI Patients:

1. Patients with suspected acute coronary syndrome and/or a documented STEMI shall be transported to the closest STEMI Receiving Center.

POLICY

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).

POLICY

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 (≤) 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
   1. Transport the patient to patient to a receiving centers with sexual assault evidence exam capabilities when:
      a. The sexual assault occurred in ≤ 14 days
   2. Approved receiving centers with sexual assault evidence exam capabilities
      a. Adventist Medical Center St. Helena.
      b. Queen of the Valley Medical Center.
      c. Kaiser Permanente Vallejo Medical Center

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:

C-09 Suspected Acute Coronary Syndrome

Suspected Acute Coronary Syndrome

FIELD TREATMENT GUIDELINE C-09

INDICATION	Retrosternal chest discomfort, heaviness, squeezing, burning or tightness; pain radiating or isolated to jaw, shoulders or back; nausea; diaphoresis; dizziness; dyspnea; anxiety; or back pain. Patient may have a history of coronary artery disease (CAD).

BLS	• Follow **General Medical Care M-01**.
	• **12-Lead ECG BP-03**.
	  ◦ If acute ST elevation myocardial infarction (STEMI) detected on 12-Lead ECG, e.g., ***MEETS ST ELEVATION MI CRITERIA***:
	  ▪ Transmit 12-Lead ECG with direct transport to the closest authorized STEMI receiving center.
	  ▪ Perform "STEMI ALERT" to the appropriate receiving facility consistent with **Administrative Policy 501, Patient Destination**.
	• **Aspirin**: *Adult*: 162 mg PO. Have patient chew if possible. Do not use enteric coated tablets.

ALS	• **Nitroglycerin**: *Adult*: 0.4 mg SL. Repeat every 3-5 min if discomfort persists and systolic blood pressure remains ≥ 100 mmHg. MAX of 1.2 mg. • **Fentanyl**: Administer according to **Pain Management AP-13**.
KEY CONCEPTS	• If STEMI detected, do not delay transport for IV placement or repeat 12-Leads. Prioritize administration of Aspirin and immediate transport, keeping on scene time to a minimum. • If STEMI detected, after the first IV is established, a second should be attempted enroute only when resources are available. • Many STEMIs evolve during prehospital care and may not be noted on the initial 12-Lead • If no STEMI detected in ECG interpretation and providers have additional concerns about the patient, consider base hospital consultation with transmission of the 12-Lead ECG. • Do not administer nitroglycerine to patients without an established IV or if they have recently taken erectile dysfunction drugs: Viagra, Staxyn, Levitra or Stendra with 24 hours or Cialis within 72 hours. • Patients who take other blood thinners (Lovenox, Coumadin [warfarin], Pradaxa [dabigatran], etc.) SHOULD still receive aspirin. • Consider an aortic dissection/aneurysm if unequal pulses in extremities, tearing pain, pain radiating to back (hypertensive or hypotensive), transport immediately.

Attachment 1C:
502 Hospital Notification

Hospital Notification

EMS ADMINISTRATION 502

PURPOSE

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.

POLICY

I. RECEIVING FACILITY NOTIFICATION

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.

B. Basic Hospital Notification Information:

1. Unit ID
2. ETA
3. Patient profile (age, gender, weight)
4. Chief Complaint
5. Treatment and response to treatment

II. AMBULANCE COMMUNICATIONS

A. When communication with a base hospital has not been established, the ambulance will notify the receiving facility.

B. Each receiving facility shall have a dedicated phone line and Med Net located at an area which is designated for ambulance communication.

1. The phone line is to be used only to receive communications from EMS units.
2. Communications via landline will conform to the same policies and procedures that govern ambulance communications via radio communication.
3. Each ambulance will maintain a list of the dedicated landline telephone numbers for each receiving facility.

III. RADIO LOG

A. Each receiving facility will continuously maintain a log book at the area designated for ambulance communication.

B. Legal Document: This log is a medical legal document and will be retained at the receiving facility for seven (7) years.

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).

D. Notation of patient cases within the radio log will include, at a minimum:

1. “Event Number” assigned to the EMS call
2. Patient's chief complaint/problem.
3. Name of Radio Nurse who received the call
4. Pertinent comments

POLICY

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

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.

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.

POLICY

I. BASIC RESPONSIBILITIES FOR TRANSFER

A. A variety of reasons may exist for the transfer of a patient to another hospital or health facility including:

1. Needed services not available at the transferring facility;
2. A shortage of needed beds at the transferring facility;
3. Patient request;
4. Patient repatriation;
5. Patient needing a lower level of care.

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.

C. Patient transfers involve the following physician and hospital responsibilities:

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.
2. Each hospital shall have its own written transfer policy clearly establishing administrative and professional responsibilities.
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.

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.

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.

POLICY

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.

POLICY

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 Nursed (RN) and appropriate equipment.

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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.

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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	• EMT staffed transfer by BLS ambulance
Advanced Life Support	• Paramedic staffed transfer on ALS equipped ambulance
RN (CCT/Air Ambulance)	• R.N. (s) in attendance on ALS equipped ambulance with additional staff as appropriate (EMT, Paramedic)
Physician	• Physician in attendance on ALS equipped unit with additional staff as appropriate (EMT, Paramedic, R.N.)

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 **administer** and **monitor** 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		

	ALS providers are approved to **monitor** the below medications				
	Morphine Sulphate ≤ 40 mEq (≥15 years only)		**X**		
	Potassium Chloride ≤ 40 mEq (≥15 years only)		**X**		

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X. COMMUNICATION

A. Transport personnel shall receive appropriate patient status report from transferring physician and/or R.N.

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.

C. Copies of all pertinent medical records, lab reports, x-rays and transfer forms accompany patient to receiving facility.

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.

E. All levels of transfer will have a patient care record completed by the transport personnel.

XI. TRANSFER SUMMARY

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.

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.

C. Monitor, maintain and adjust as necessary to maintain a preset rate of flow and/or turn off the flow of intravenous fluid.

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.

Attachment 1E:
Cardiovascular Systems of Care Charter

NAPA COUNTY EMS AGENCY

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

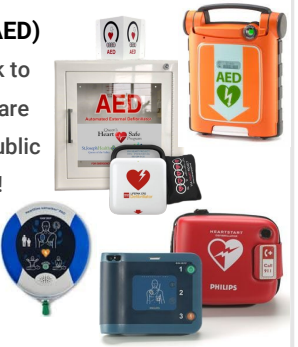
F. C-SOC Process

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 1F:
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

NAPA COUNTY Heartsafe Community

Providence Queen of the Valley Medical Center

NAPA COUNTY EMERGENCY MEDICAL SERVICES

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

Heart Attack

Do **NOT** drive to the hospital.
Call 9-1-1.

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

Act in Time!

	Women	Men
Chest pain or discomfort		
Shortness of breath		
Arm, back, neck, or jaw pain		
Nausea, lightheaded, or unusually tired		

Stroke

Act in Time!

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

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 Cardiaco

Ataque Al Corazón

Derrame Cerebral

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

Sepa como identificar una emergencia médica

Actúe A Tiempo

NAPA COUNTY Heartsafe Community

Providence Queen of the Valley Medical Center

NAPA COUNTY EMERGENCY MEDICAL SERVICES

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!

	Mujeres	Hombres
Dolor o molestia en el pecho	✓	✓
Dificultad para respirar	✓	✓
Dolor de brazo, espalda, cuello o mandíbula	✓	✓
Náuseas, mareos o cansancio inusual	✓	

Derrame Cerebral

¡Actúe a tiempo!

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

R	Á	P	I	D	O
					
Rostro con parálisis	**A**lteración del equilibrio	**P**érdida de fuerza en un brazo o pierna	**I**mpedimento visual	**D**ificultad para hablar	**¡O**btenga ayuda rápido, llame al 911!

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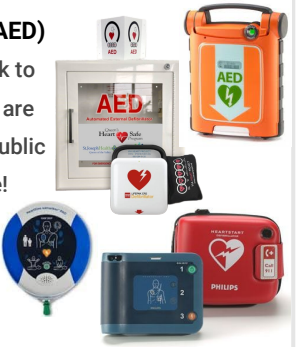
These can provide an electrical shock to the heart during cardiac arrest. They are located in businesses, schools, and public areas, etc. See if you can find one!



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- Siga las indicaciones

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Adventist Health St. Helena

NAPA COUNTY EMERGENCY MEDICAL SERVICES

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	Mujeres	Hombres
Dolor o molestia en el pecho	✓	✓
Dificultad para respirar	✓	✓
Dolor de brazo, espalda, cuello o mandíbula	✓	✓
Náuseas, mareos o cansancio inusual	✓	

Derrame Cerebral

¡Actúe a tiempo!

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R	Á	P	I	D	O
					
Rostro con parálisis	**A**lteración del equilibrio	**P**érdida de fuerza en un brazo o pierna	**I**mpedimento visual	**D**ificultad para hablar	**¡O**btenga ayuda rápido, llame al 911!