PURPOSE: This policy is intended to provide EMS personnel with parameters to determine whether or not to withhold resuscitative efforts in accordance with the patient’s wishes, and to provide guidelines for base hospital physicians to discontinue resuscitative efforts and pronounce death.

AUTHORITY: California Health and Safety Code, Division 2.5
California Probate Code, Division 4.7
California Family Code, Section 297-297.5
California Health and Safety Code, Division 1, Part 1.8, Section 443 et seq.

DEFINITIONS:

Advance Health Care Directive (AHCD): A written document that allows patients who are unable to speak for themselves to provide health care instructions and/or appoint a Power-of-Attorney for Health Care. There is no one standard format for an AHCD. Examples of AHCDs include:

- Durable power of attorney for Healthcare (DPAHC)
- Healthcare proxies
- Living wills (valid in California if dated prior to 7-1-2000; advisory but not legally binding after that date)

Agent: An individual, eighteen years of age or older, designated in a durable power of attorney for health care to make health care decisions for the patient, also known as “attorney-in-fact”.

Aid-in-Dying Drug: A drug determined and prescribed by a physician for a qualified individual, which the qualified individual may choose to self-administer to bring about his or her death due to terminal illness. The prescribed drug may take effect within minutes to several days after self-administration.

Conservator: Court-appointed authority to make health care decisions for a patient.

Determination of Death: To conclude that a patient has died by conducting an assessment to confirm the absence of respiratory, cardiac, and neurologic function.

End of Life Option Act: This California state law authorizes an adult, eighteen years or older, who meets certain qualifications, and who has been determined by his or her attending physician to be suffering from a terminal disease to make a request for an “aid-in-dying drug” prescribed for the purpose of ending his or her life in a humane and dignified manner.

Immediate Family: The spouse, domestic partner, parent, adult children, adult sibling(s) or family member intimately involved in the care of the patient.
Organized ECG Activity: A narrow complex supraventricular rhythm.

Pronouncement of Death: A formal declaration by a base hospital physician that life has ceased.

Standardized Patient-Designated Directives: Forms or medallions that recognize and accommodate a patient’s wish to limit prehospital treatment at home, in long term care facilities, or during transport between facilities. Examples include:

- Statewide Emergency Medical Services Authority (EMSA)/California Medical Association (CMA) Prehospital DNR Form (Ref. No. 815.1)
- Physician Orders for Life-Sustaining Treatment (POLST, Ref. No. 815.2)
- State EMS Authority-approved DNR Medallion

PRINCIPLES:

1. Resuscitative efforts are of no benefit to patients whose physical condition precludes any possibility of successful resuscitation.

2. EMTs and paramedics may determine death based on specific criteria set forth in this policy.

3. Base hospital physicians may pronounce death based on information provided by the paramedics in the field and guidelines set forth in this policy.

4. If there is any objection or disagreement by family members or EMS personnel regarding terminating or withholding resuscitation, basic life support (BLS) resuscitation, including defibrillation, may continue or begin immediately and paramedics should contact the base hospital for further directions.

5. Aggressive resuscitation in the field to obtain the return of spontaneous circulation (ROSC) is encouraged. Transporting patients without ROSC is discouraged.

6. EMS personnel should honor valid do-not-resuscitate (DNR) orders and other patient designated end-of-life directives in the field and act in accordance with the patient’s wishes when death appears imminent.

POLICY:

I. EMS personnel may determine death in the following circumstances:

   A. In addition to the absence of respiration, cardiac activity, and neurologic reflexes, one or more of the following physical or circumstantial conditions exist:

      1. Decapitation

      2. Massive crush injury

      3. Penetrating or blunt injury with evisceration of the heart, lung or brain
4. Decomposition

5. Incineration

6. Pulseless, non-breathing victims with extrication time greater than fifteen minutes, where no resuscitative measures can be performed prior to extrication.

7. Penetrating trauma patients who, based on the paramedic's thorough assessment, are found apneic, pulseless, asystolic, and without pupillary reflexes upon the arrival of EMS personnel at the scene.

8. Blunt trauma patients who, based on a paramedic's thorough patient assessment, are found apneic, pulseless, and without organized ECG activity (narrow complex supraventricular rhythm) due to traumatic mechanism upon the arrival of EMS personnel at the scene.

9. Pulseless, non-breathing victims of a multiple victim incident where insufficient medical resources preclude initiating resuscitative measures.

10. Drowning victims, when it is reasonably determined that submersion has been greater than one hour.

11. Rigor mortis (requires assessment as described in Section I, B.)

12. Post-mortem lividity (requires assessment as described in Section I, B.)

B. If the initial assessment reveals rigor mortis and/or post-mortem lividity only, EMTs and/or paramedics shall perform the following assessments (may be performed concurrently) to confirm the absence of respiratory, cardiac, and neurologic function for determination of death in the field:

1. Assessment of respiratory status:
   a. Assure that the patient has an open airway.
   b. Look, listen and feel for respirations. Auscultate the lungs for a minimum of 30 seconds to confirm apnea.

2. Assessment of cardiac status:
   a. Auscultate the apical pulse for a minimum of 60 seconds to confirm the absence of heart sounds.
   b. Adults and children: Palpate the carotid pulse for a minimum of 60 seconds to confirm the absence of a pulse.
   c. Infants: Palpate the brachial pulse for a minimum of 60 seconds to confirm the absence of a pulse.

3. Assessment of neurological reflexes:
a. Check for pupillary response with a penlight or flashlight to determine if pupils are fixed and dilated.

b. Check and confirm unresponsive to pain stimuli.

C. Patients in atraumatic cardiopulmonary arrest who do not meet the conditions described in Section I. A. require immediate BLS measures to be initiated. If one or more of the following conditions is met, resuscitation may be discontinued and the patient is determined to be dead:

1. A valid standardized patient-designated directive indicating DNR.

2. A valid AHCD with written DNR instructions or the agent identified in the AHCD requesting no resuscitation.

3. Immediate family member present at scene:
   a. With a patient-designated directive on scene requesting no resuscitation
   b. Without said documents at scene, with full agreement of immediate family requesting no resuscitation, and EMS providers concur

4. Parent or legal guardian is required and must be present at scene to withhold or terminate resuscitation for patients less than 18 years of age.

II. Patients in atraumatic cardiopulmonary arrest who do not meet the conditions described in Section I require immediate cardiopulmonary resuscitation in accordance with Ref. No. 1210, Treatment Protocol: Cardiac Arrest. Base contact for medical direction shall be established when indicated by Ref. No. 1210.

A. EMS Personnel may determine death if a patient is in asystole after 20 minutes of quality cardiopulmonary resuscitation on scene and meets ALL of the following criteria:

1. Patient 18 years or greater

2. Arrest not witnessed by EMS personnel

3. No shockable rhythm identified at any time during the resuscitation

4. No ROSC at any time during the resuscitation

5. No hypothermia

B. Base Physician consultation for pronouncement is not required if Section A is met.

C. Base Physician contact shall be established for all patients in cardiopulmonary
arrest who do not meet the conditions described in Section I or IIA of this policy.

D. In the event that immediate family members on scene request termination of resuscitation after resuscitation is in progress, and the patient does not meet criteria in section IIA, base physician consultation shall be made for termination and pronouncement. This does not apply to brief initiation of CPR while establishing patient/family wishes as per I.C.3.

III. Physician guidelines for transport versus termination

A. Resuscitation should be continued on-scene until one of the following:
   1. ROSC is confirmed with a corresponding rise in EtCO₂
   2. Base physician determines further resuscitative efforts are futile
   3. Base physician determines transport is indicated based on absence of futility in patient without ROSC after 40 minutes of on-scene resuscitation
   4. The patient meets criteria for early transport utilizing a mechanical compression device for initiation of extracorporeal membrane oxygenation (ECMO)

B. Patients who have not achieved ROSC after 40 minutes of on-scene resuscitation should be considered for transport if:
   1. Arrest witnessed by EMS personnel
   2. Persistent VF/VT rhythm after three (3) shocks delivered

C. Additional considerations for transport of pulseless non-breathing patients may include:
   1. Suspected reversible non-cardiac etiologies, including hypothermia
   2. Paramedic judgment (i.e., unsafe environment, public location)
   3. Shock delivered at any time during the resuscitation

IV. Crime Scene Responsibility, Including Presumed Accidental Deaths and Suspected Suicides

A. Responsibility for medical management rests with the most medically qualified person on scene.

B. Authority for crime scene management shall be vested in law enforcement. To access the patient it may be necessary to ask law enforcement officers for assistance to create a “safe path” that minimizes scene contamination.

C. If law enforcement is not on scene, EMS personnel should attempt to create a "safe path" and secure the scene until law enforcement arrives.
V. Procedures Following Pronouncement of Death

A. The deceased should not be moved without the coroner’s authorization. Any invasive equipment (i.e., intravenous line, endotracheal tube) used on the patient should be left in place.

**NOTE:** If it is necessary to move the deceased because the scene is unsafe, the body is creating a hazard, or the body is at risk of loss through fire or flood, the EMS personnel may relocate the deceased to a safer location or transport to the most accessible receiving facility.

B. If law enforcement or the coroner confirms that the deceased will not be a coroner’s case and the personal physician is going to sign the death certificate, any invasive equipment used during the resuscitation may be removed.

C. EMS personnel should remain on scene until law enforcement arrives. During this time, when appropriate, the provider should provide grief support to family members.

VI. Required Documentation for Patients Determined Dead/Pronounced in the Field

A. The time and criteria utilized to determine death; the condition, location and position of the body, and any care provided.

B. The location and the rationale if the deceased was moved. If the coroner authorized movement of the deceased, document the coroner’s case number (if available) and the coroner’s representative who authorized the movement.

C. Time of pronouncement and name of the pronouncing physician if base hospital contact was initiated

D. The name of the agent identified in the AHCD or patient-designated directive or the name of the immediate family member who made the decision to withhold or withdraw resuscitative measures. Obtain their signature on the EMS Report Form.

E. If the deceased is not a coroner’s case and their personal physician is going to sign the death certificate:

1. Document the name of the coroner’s representative who authorized release of the patient, and
2. The name of the patient’s personal physician signing the death certificate, and
3. Any invasive equipment removed

VII. End of Life Option Act
A. Resuscitation shall be withheld on patients in cardiopulmonary arrest who have self-administered an aid-in-dying drug (see Ref. No. 815.4, End of Life Option Field Quick Reference Guide).

B. Document the presence of a Final Attestation and attach a copy if available.

CROSS REFERENCE:

Prehospital Care Manual:
Ref. No. 516, Cardiac Arrest (Non-Traumatic) Patient Destination
Ref. No. 518, Decompression Emergencies/Patient Destination
Ref. No. 519, Management of Multiple Casualty Incidents
Ref. No. 606, Documentation of Prehospital Care
Ref. No. 815, Honoring Prehospital Do Not Resuscitate Orders
Ref. No. 815.1, EMSA/CMA Prehospital Do Not Resuscitate (DNR) Form
Ref. No. 815.2, Physician Orders for Life-Sustaining Treatment (POLST) Form
Ref. No. 815.3, Sample - Final Attestation For An Aid-In-Dying Drug to End My Life in a Humane and Dignified Manner
Ref. No. 815.4, End of Life Option Field Quick Reference Guide
Ref. No. 819, Organ Donor Identification