Purpose:

This policy outlines the process by which field personnel (ALS & BLS) may determine death. Field personnel need not initiate or continue resuscitative efforts when death has been determined, respective to their scope of practice, using the following criteria outlined below. Only physicians and coroners are allowed to make a pronouncement of death. This guideline applies to both adult and pediatric patients.

In all cases where determination of death is considered, it is assumed that the patient has no pulse or respirations. If there is any doubt, initiate CPR and resuscitative efforts, then contact Medical Control as soon a reasonably possible.

In order to determine a patient dead at least one or more of the following criteria below must be applicable. Patients may be treated and transported, if in the judgment of the lead medic, the scene dictates that this would be beneficial for field personnel, bystanders, family members, personnel safety or other causes not outlined in this policy. In addition, Medical Control contact is expected for any patients or situations that do not specifically meet the following criteria. In those cases where Medical Control contact is made, the Emergency Department physician will have final authority as to what course of action shall be taken.

If the patient clearly meets one or more of the following criteria the patient may be determined to be dead with no Medical Control contact necessary. In all cases where death has been determined, notify the appropriate law enforcement agency through dispatch. Law enforcement then has the responsibility of contacting the Coroner's Office (or investigating agency) with jurisdictional authority.

Causes for Determination of Death (BLS or ALS):

1. Decapitation.
2. Incineration.
3. Rigor mortis.
4. Livor mortis (lividity).
5. Decomposition.
6. Total separation of vital organs from body, or total destruction of organs with absence of life signs.
7. Absence of life signs when there are multiple victims, and resuscitation would hinder care of more viable patients.

8. Valid DNR, Living Will and/or situation where Durable Power of Attorney is applicable.
9. Massive head trauma.

Causes for Determination of Death (ALS Only):

All cases described below require contact with a medical control physician to approve termination of treatment.

1. Medical:
    a. Patient is asystolic in at least three (3) leads after treatment per protocol and medical Control is consulted.
2. Blunt trauma. Resuscitative efforts may be withheld or terminated in patients found apneic and pulseless with:
    a. Blunt trauma to the head, neck or torso; **and**
    b. No spontaneous pulse or respiration following appropriate medical interventions, which include, for example: ensuring a patent airway or chest decompression. (The majority of injuries sustained by these patients are not compatible with life. "Appropriate" interventions will vary and should be dictated by guidance from the **medical control**.)
3. Penetrating Trauma. Resuscitation and rapid transport to a hospital facility should be initiated on all patients found in full arrest secondary to penetrating trauma. Exceptions may exist in the following circumstances:
    a. Patients found pulseless and apneic with penetrating trauma **if** the provision of ALS has been unavailable for **at least 20 minutes** from the time EMS personnel initiate on-scene assessment. Appropriate interventions at this point will vary and should be dictated by guidance from the Medical Control.
    b. However, if there is any doubt about duration of the arrest, then resuscitation and rapid transport should be initiated.

Definitions:

1. Absence of life signs- the physical examination of the patient, including palpating pulse for minimum of sixty seconds and assessing absence of respirations for minimum of sixty seconds.
2. Asystole- the absence of cardiac electrical activity in three leads for a minimum of sixty seconds.

3. Rigor Mortis- the stiffness seen in corpses. Rigor mortis begins with the muscles of mastication and progresses from the head down the body affecting the legs and feet last. Generally manifested in 1 to 6 hours and a maximum of 6 to 24 hours.
4. Livor Mortis (Lividity)- Cutaneous dark spots on dependant portions of a corpse. Generally manifested within 1/2 to 2 hours. Reaches maximum presentation in 8 to12 hours.