	DEPARTMENT OF PUBLIC SAFETY	EFFECTIVE DATE: July 7, 2008	POLICY NO.: LAW.07.01
	LAW ENFORCEMENT ADMINISTRATION POLICY AND PROCEDURES	SUPERSEDES (Policy No. & Date): 10-14-02	
	SUBJECT: AUTOMATIC EXTERNAL DEFIBRILLATORS		Page 1 of 7

1.0 PURPOSE

To establish guidelines for staff training and use of Automatic External Defibrillators (AEDs) by Law Enforcement personnel.

2.0 REFERENCES & DEFINITIONS

1. References

- a. 353C-2 HRS Director of Public Safety, Powers and Duties.
- b. 453-2 HRS Section 1(b)(5)(A) Use of Automatic External Defibrillators
- c. American Heart Association Heartsaver AED (1997-99).
- d. Mosby's Medical, Nursing & Allied Health Dictionary (1994).
- e. FirstSave Operation and Service Manual (2000).

2. Definitions

- a. Advanced Cardiac Life Support (ACLS): emergency medical procedures in which basic life support efforts of CPR are augmented by establishment of an intravenous fluid line, drug administration, control of cardiac arrhythmia's, and ventilation equipment. The procedures usually require direct or indirect supervision by a physician.
- b. Automatic External Defibrillator (AED): an electronic device that interprets cardiac rhythms, makes a "shock" or "no shock" decision, and, if appropriate, delivers an electrical shock to the patient. AEDs guide the user through the process by audio (voice) and/or visual prompts without requiring any discretion or judgment.
- c. Basic Cardiac Life Support (BCLS): the role of CPR and emergency cardiac care in reinstating either circulatory or respiratory function, or both, in the emergency treatment of a victim of cardiac or respiratory arrest.

LAW P & PM	SUBJECT:	POLICY NO.:
	AUTOMATIC EXTERNAL DEFIBRILATORS	LAW.07.01
		EFFECTIVE DATE:
		July 7, 2008
		Page 2 of 7

- d. Cardiopulmonary Resuscitation (CPR): a basic emergency procedure for life support, which attempts to give a person in cardiopulmonary arrest an open airway, adequate ventilation, and through chest compressions, mechanical circulation to the vital organs. Requires no adjunctive equipment.
- e. Health Care Provider: an individual licensed by the State of Hawaii to practice medicine or render care to patients.
- f. Heart Attack: occurs when the blood supply part of the heart muscle itself is severely reduced or stopped because of an obstruction in an artery. A heart attack can lead to sudden cardiac arrest.
- g. Universal Precautions: an approach to infection control designed to prevent transmission of blood-borne pathogens such as AIDS and Hepatitis B in health care settings. The guidelines include specific recommendations for the use of gloves, pocket face masks, barrier devices, and protective eye wear when contact with blood or body secretions containing blood is anticipated.
- h. Ventricular Fibrillation (VF) (sudden cardiac arrest): a rapid, ineffective quivering of the ventricles accompanied by chaotic electrical activity and no pumping action. Blood pressure falls to zero, the person loses consciousness very quickly, and unless the condition is reversed, death follows in a matter of minutes. The only effective treatment for VF is electrical defibrillation that terminates the chaotic activity, allowing an organized rhythm to take over.
- i. Ventricular Tachycardia (VT): a series of at least three beats arising from a ventricular focus at a rate greater than 100 beats per minute. The beats usually arise from a single focus and are at a rate of 150 to 200 beats per minute. VT without pulse indicates cardiac arrest.

3.0 POLICY

- .1 The physician shall approve the use of AEDs.
- .2 The use of the AED shall be based on the "chain of survival" concept set forth by the American Heart Association, which consists of early access (recognition and activation of the emergency medical system), prompt CPR (opening the airway, ventilation, and blood circulation), early defibrillation (identification and

LAW P & PM	SUBJECT: AUTOMATIC EXTERNAL DEFIBRILATORS	POLICY NO.: LAW.07.01
		EFFECTIVE DATE: July 7, 2008
		Page 3 of 7

treatment of VF with the AED), and early notification of ACLS providers (for advanced airway control and rhythm appropriate medications).

4.0 PROCEDURES

.1 Assessment/Treatment Priorities

- a. Universal blood and body fluid precautions shall be maintained.
- b. Responders shall secure the area and activate the emergency medical system as soon as possible by calling 911.
- c. CPR shall be initiated pending the availability of the AED. Once available, the AED shall have priority over CPR. CPR shall be continued:
 - 1) While the AED is being applied, if necessary, chest compressions shall be stopped while placing AED electrode panels.
 - 2) If there is a delay in obtaining or attaching the AED; and
 - 3) If the AED signals that a shock is not advised.
- d. AEDs shall be used only on patients who are not breathing and are without a pulse.
 - 1) Unresponsiveness, absence of breathing, and no pulse shall be determined.
 - 2) All potential non-cardiac causes of cardiac arrest shall be considered (i.e. trauma, overdose, electric shock, etc.).
 - 3) AEDs shall not be used in the following circumstances: Consciousness, respiratory arrest with pulses, obvious signs and symptoms of death, and on persons under eight years of age or less than 65 pounds.

.2 AED Protocol

- a. Power on the AED first.

LAW P & PM	SUBJECT: AUTOMATIC EXTERNAL DEFIBRILATORS	POLICY NO.: LAW.07.01
		EFFECTIVE DATE: July 7, 2008
		Page 4 of 7

The AED shall be turned on to allow the voice and visual prompts to guide the operator.

- b. Attach the AED to the patient.
 - 1) The AED connecting cables shall be attached to the AED, if not already connected.
 - 2) The AED connecting cables shall be attached to the adhesive chest electrode pads, if not already connected.
- c. Analyze the rhythm.
 - 1) The patient shall be cleared before and during analysis. No one shall touch the patient, including the person doing the rescue breathing.
 - 2) The ANALYZE button shall be pressed to start rhythm analysis, if the AED brand requires this step.
- d. The "Shock Indicated" sequence shall be as follows: Clear, Shock, Clear, Analyze.
 - 1) The patient shall be cleared before pushing the SHOCK button. No one shall touch the patient, including the person doing the rescue breathing.
 - 2) The SHOCK button shall be pressed to deliver the shock. The patient may display muscle contractions.
 - 3) The patient shall be cleared and analyzed as indicated in Step C above.
 - 4) The "Shock Sequence" shall be repeated up to two more times if the AED signals "shock indicated."
- e. The "No Shock Indicated" sequence shall be as follows:
 - 1) Check pulse.

LAW P & PM	SUBJECT: AUTOMATIC EXTERNAL DEFIBRILATORS	POLICY NO.: LAW.07.01
		EFFECTIVE DATE: July 7, 2008
		Page 5 of 7

- 2) If pulse, check breathing. If breathing is inadequate, assist breathing. If breathing is adequate, place the patient in the recovery positions.
- 3) If no pulse, resume CPR for one minute, then recheck pulse.
- 4) If no pulse, analyze rhythm; then repeat the sequences: "shock indicated" or "no shock indicated."

.3 EMS-ACLS arrival

- a. Upon arrival, ACLS-trained providers shall have authority over the scene.
- b. First responders and AED providers shall be prepared to give a quick report to the EMS-ACLS team.

.4 Location and availability of AEDs

- a. The location of the AED in Judiciary facilities shall take into consideration the staffing, the design of the facility, the public hours of operation for the facility, and the staff trained in CPR and AED applications.
- b. The location of the AED in law enforcement vehicles, state buildings or vehicles, buildings or locations under the control of the Department of Public Safety shall be approved by the Director of Public Safety or his/her designate, taking into consideration staffing, design, hours of operation and staff trained in CPR & AED applications.

.5 AED Maintenance

- a. Daily diagnostic checks shall be conducted and documented by facility staff trained in the use and maintenance of the AED to ensure it is always ready for use. The Division Administrator shall determine who the responsible staff shall be.
- b. Daily maintenance logs shall be kept and signed by persons conducting the diagnostic check. Problems and corrective measures taken shall be documented.

LAW P & PM	SUBJECT: AUTOMATIC EXTERNAL DEFIBRILATORS	POLICY NO.: LAW.07.01
		EFFECTIVE DATE: July 7, 2008
		Page 6 of 7

- c. When the external status indicator on the AED is red, indicating a problem, the person conducting the daily check shall open the AED to determine if a loose electrode connection or weak battery may be responsible for the problem as will be indicated. If an internal circuitry is the problem as, will be indicated, the following steps should be taken as soon as possible. Replacement parts should be ordered from the appropriate vendor.
- d. If the problem cannot be corrected, the person conducting the daily check shall notify Survivalink's Technical Support Department at 1-888-466-8686 or 1-612-939-4181 or FAX at 1-612-939-4191, to secure a replacement loaner within 24 hours. Also, contact Survivalink's Customer Service number at 1-800-991-5465.

.6 AED Training

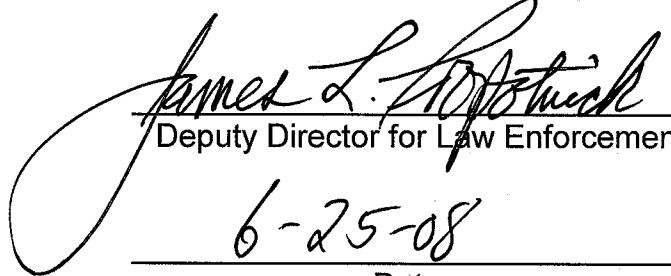
- a. Certified CPR and AED trainer(s) shall be responsible for initial training in AED to designated staff. After the initial training, the AED refresher courses concurrent with the CPR re-certification courses shall be provided.
- b. A current CPR certification shall be a prerequisite for the initial AED training.
- c. Designated sites shall be equipped with an AED.
- d. It shall be the goal of the Department of Public Safety to eventually train all law enforcement personnel in the use of AED's.
- e. The American Heart Association's Heartsaver AED course shall be the designated manual for AED training.
- f. Protocols for AED training and certification shall be conducted in accordance with the standards of the American Heart Association.
- g. A physician shall approve an authorized training program to ensure that it is medically sound and educationally effective.

5.0 SCOPE


This policy and procedure applies to all Law Enforcement Personnel.

LAW P & PM	SUBJECT:	POLICY NO.:
	AUTOMATIC EXTERNAL DEFIBRILATORS	LAW.07.01
		EFFECTIVE DATE: July 7, 2008
		Page 7 of 7

APPROVAL RECOMMENDED:


Deputy Director for Law Enforcement
6-25-08
Date

APPROVED:


Director
7/07/08
Date