

**STORAGE NAME:** h0411.hcs

**DATE:** February 27, 1997

**HOUSE OF REPRESENTATIVES  
COMMITTEE ON  
HEALTH CARE SERVICES  
BILL ANALYSIS & ECONOMIC IMPACT STATEMENT**

**BILL #:** HB 411

**RELATING TO:** Automatic External Defibrillators

**SPONSOR(S):** Rep. Byrd

**STATUTE(S) AFFECTED:** s. 401.291, F.S.

**COMPANION BILL(S):** None

**ORIGINATING COMMITTEE(S)/COMMITTEE(S) OF REFERENCE:**

(1) HEALTH CARE SERVICES

(2)

(3)

(4)

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**I. SUMMARY:**

An automatic external defibrillator (AED) is a medical device which is designed to shock the chest of a person in cardiac arrest and return the heart to a normal rhythm, thus saving the person's life. Current law authorizes the use of an AED by members of an emergency medical services response team, including police officers, firefighters, paramedics, emergency medical technicians, and first responders (see s. 401.291, F.S.).

This bill amends current law to authorize the use of an AED by persons outside the emergency medical services response team. In order to qualify to use an AED, a person must successfully complete an appropriate training course in cardiopulmonary resuscitation or a basic first aid course that includes cardiopulmonary resuscitation and demonstrate proficiency in the use of an AED. An EMS medical director must authorize the use an AED by an individual who meets the training requirements specified above or the EMS medical director may approve and designate another physician to authorize the use an AED by an individual who meets the training requirements specified above.

There is no fiscal impact on state or local governments.

II. SUBSTANTIVE ANALYSIS:

A. PRESENT SITUATION:

Heart disease is the leading cause of death in the U.S. and in Florida. Although the death rate from heart disease has been declining for the past thirty years, sudden cardiac arrest remains a major unresolved public health problem. Each year in the U.S., sudden cardiac arrest strikes more than 350,000 people, making it the single leading cause of death. Due to the unexpectedness with which sudden cardiac arrest strikes, most of its victims die before reaching a hospital. Currently the chances of surviving sudden cardiac arrest are less than 1 in 20.

Sudden cardiac arrest is usually caused by a condition called ventricular fibrillation. This is a condition where the normal flow of electrical impulses in the heart is disturbed and the heart muscle is not contracting in a coordinated way. Ventricular fibrillation is often caused by an acute constriction of the coronary artery which disrupts blood flow to the heart muscle and disturbs the electrical activity of the heart.

When a person's heart goes into ventricular fibrillation, the heart (usually) must be restarted through defibrillation within a matter of minutes or the patient will die. Cardiopulmonary resuscitation can be used to pump blood through the body, but it (usually) will not restart the heart.

A short history of the development of defibrillation is as follows. As early as 1947 it was demonstrated that ventricular fibrillation could be abolished and a normal rhythm restored to the human heart by passing an electrical current through electrodes applied directly to the heart. By 1956 a defibrillator was perfected that could pass a current through the intact chest wall and defibrillate the heart and restore a normal rhythm. However, these early units were large and required special training so they were initially available only in hospital emergency rooms.

Within several years, defibrillators were made more portable and paramedics trained to use them in the field. Paramedics had to be experienced to know how to recognize when a heart was in ventricular fibrillation. An attempt to defibrillate the heart of a patient when the patient was not fibrillating might actually kill the patient. There were other dangers associated with the use of defibrillators, including the risk of shocking oneself or shocking a bystander.

Due to risks associated with the use of defibrillators, their use in the field is classified as "advanced life support" (see s. 401.23(1), F.S.). The minimum level of training required for advanced life support is the paramedic and in some cases an emergency medical technician (EMT). Minimum training requirements for a paramedic are from 700 to 1000 hours and for an EMT minimum training consists of from 120 to 200 hours.

Recent advances in medical technology have resulted in the development of the automatic external defibrillator (AED). An AED can analyze the electrical current coming from the heart of the victim and determine if the heart is fibrillating, or if the heart has a "reasonable beat" but is contracting weakly. In the first case, the AED will automatically pass a current through the heart. A semi-automatic defibrillator is also available which requires the operator to push a button. However neither device will (theoretically) allow a patient to be shocked unless the patient is in ventricular fibrillation.

Based on the development of the AED and in an effort to reduce the death rate associated with sudden cardiac arrest, the Legislature enacted section 401.291, Florida Statutes in 1990. This law broadened the list of persons who are authorized to use an AED to include first responders. First responders include police officers, firefighters, and citizens who are trained as part of locally coordinated emergency medical services response teams. In order to qualify to use an AED, a first responder must meet specific training requirements including certification in cardiopulmonary resuscitation or successful completion of an 8 hour basic first aid course that includes cardiopulmonary resuscitation training, demonstrated proficiency in the use of an automatic or semiautomatic defibrillator, and successful completion of at least 6 hours of training in at least two sessions, in the use of an AED. The local EMS medical director or another physician authorized by the medical director must authorize the use of an AED by a first responder.

It appears the enactment of the 1990 law to expand the use of an AED to first responders has had little impact on reducing the rate of death from sudden cardiac arrest in Florida. Therefore, the American Heart Association is proposing an even broader expansion of persons authorized to use an AED to include persons who meet minimum training requirements but who are not members of a emergency medical services response team.

**B. EFFECT OF PROPOSED CHANGES:**

Any person who meets the minimum training requirements and who is authorized by the local EMS medical director or another physician approved by the EMS medical director will be authorized to use an AED. Minimum training requirements include successful completion of an appropriate training course in cardiopulmonary resuscitation or a basic first aid course that includes cardiopulmonary resuscitation, and demonstrated proficiency in the use of an AED.

There may be an increase in the number of AEDs across the state in places where people congregate like malls, sporting events, and festivals. This could result in a reduction in the number of deaths associated with sudden cardiac arrest.

**C. APPLICATION OF PRINCIPLES:**

1. Less Government:

a. Does the bill create, increase or reduce, either directly or indirectly:

(1) any authority to make rules or adjudicate disputes?

No.

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- (2) any new responsibilities, obligations or work for other governmental or private organizations or individuals?

The bill revises the responsibilities of local emergency medical services medical directors for establishing written procedures and protocols for the use of an AED.

- (3) any entitlement to a government service or benefit?

No.

- b. If an agency or program is eliminated or reduced:

- (1) what responsibilities, costs and powers are passed on to another program, agency, level of government, or private entity?

N/A

- (2) what is the cost of such responsibility at the new level/agency?

N/A

- (3) how is the new agency accountable to the people governed?

N/A

2. Lower Taxes:

- a. Does the bill increase anyone's taxes?

No.

- b. Does the bill require or authorize an increase in any fees?

No.

- c. Does the bill reduce total taxes, both rates and revenues?

No.

- d. Does the bill reduce total fees, both rates and revenues?

No.

- e. Does the bill authorize any fee or tax increase by any local government?

No.

3. Personal Responsibility:

- a. Does the bill reduce or eliminate an entitlement to government services or subsidy?

No.

- b. Do the beneficiaries of the legislation directly pay any portion of the cost of implementation and operation?

N/A

4. Individual Freedom:

- a. Does the bill increase the allowable options of individuals or private organizations/associations to conduct their own affairs?

Yes, in a sense. It expands access to a device used to save lives.

- b. Does the bill prohibit, or create new government interference with, any presently lawful activity?

No.

5. Family Empowerment:

- a. If the bill purports to provide services to families or children:

(1) Who evaluates the family's needs?

N/A

(2) Who makes the decisions?

N/A

(3) Are private alternatives permitted?

N/A

(4) Are families required to participate in a program?

N/A

(5) Are families penalized for not participating in a program?

N/A

b. Does the bill directly affect the legal rights and obligations between family members?

No.

c. If the bill creates or changes a program providing services to families or children, in which of the following does the bill vest control of the program, either through direct participation or appointment authority:

(1) parents and guardians?

N/A

(2) service providers?

N/A

(3) government employees/agencies?

N/A

**D. SECTION-BY-SECTION ANALYSIS:**

**Section 1.** Amends s. 401.291, F.S., relating to Automatic External Defibrillators, to revise legislative intent to set minimum standards for the use of AEDs in an out-of-hospital rather than in a coordinated emergency medical response environment. The bill also revises training requirements for the use of an AED to eliminate a reference to a specific number of hours of training and to add a requirement for training in the need to activate the EMS system as soon as possible upon use of the AED.

**Section 2.** Provides an effective date of upon becoming a law.

**III. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT:**

A. FISCAL IMPACT ON STATE AGENCIES/STATE FUNDS:

1. Non-recurring Effects:

None.

2. Recurring Effects:

None.

3. Long Run Effects Other Than Normal Growth:

None.

4. Total Revenues and Expenditures:

None.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS AS A WHOLE:

1. Non-recurring Effects:

None.

2. Recurring Effects:

None.

3. Long Run Effects Other Than Normal Growth:

None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

1. Direct Private Sector Costs:

Persons who wish to use an AED will incur training costs associated with meeting minimum training requirements. Private businesses may feel the need to expend funds to purchase an AED and train employees in its use.

2. Direct Private Sector Benefits:

There may be a reduction in the rate of deaths due to sudden cardiac arrest.

3. Effects on Competition, Private Enterprise and Employment Markets:

Demand in the market for AEDs may be increased.



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D. FISCAL COMMENTS:

None.

IV. CONSEQUENCES OF ARTICLE VII, SECTION 18 OF THE FLORIDA CONSTITUTION:

A. APPLICABILITY OF THE MANDATES PROVISION:

This bill does not require counties or municipalities to spend funds or to take an action requiring the expenditure of funds.

B. REDUCTION OF REVENUE RAISING AUTHORITY:

This bill does not reduce the authority that municipalities or counties have to raise revenues.

C. REDUCTION OF STATE TAX SHARED WITH COUNTIES AND MUNICIPALITIES:

This bill does not reduce the percentage of a state tax shared with counties or municipalities.

V. COMMENTS:

To date, it appears that all AEDs on the market are listed as legend devices by the federal Food and Drug Administration. Therefore, a person would have to have a physician order to purchase an AED.

VI. AMENDMENTS OR COMMITTEE SUBSTITUTE CHANGES:

VII. SIGNATURES:

COMMITTEE ON HEALTH CARE SERVICES:

Prepared by:

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Michael P. Hansen

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