During Sudden Cardiac Arrest, a person’s chance of survival can be increased if Cardiopulmonary Resuscitation (CPR) is combined with the use of an Automated External Defibrillator (AED) as quickly as possible.

The State University of New York College of Environmental Science and Forestry has a CPR/AED program that is administered by the Environmental Health & Safety Office, and approved by the NYS Department of Health. The Emergency Health Care Provider is Dr. David Thomson, Emergency Medicine Physician from SUNY Upstate Medical University. The program consists of ESF employees who are certified responders using Automated External Defibrillators that are strategically located on ESF campuses.

What is an AED and how does it work?

When an adult experiences a heart attack that becomes a sudden cardiac arrest (sudden, abrupt loss of heart function), the heart most often goes into uncoordinated electrical activity called ventricular fibrillation. During this condition the heart does not pump blood effectively, and death can occur within minutes.

The AED is an electronic device that delivers a shock to restore the rhythm of a fibrillating heart. An AED contains a microprocessor that analyzes and detects a fibrillating heart rhythm through adhesive pads on a victim's chest, judges whether defibrillation is needed, and then delivers a measured shock. The shock stuns the heart muscle, which gives it the opportunity to resume beating
effectively. The use of CPR and an AED are the only effective treatments for ventricular fibrillation, but survival of sudden cardiac arrest is very time dependent, and requires a response within several minutes.

**How common is Sudden Cardiac Arrest (SCA)?**

SCA is one of the leading causes of death in the United States. The American Heart Association estimates that at least 250,000 people suffer from SCA each year. The median age of victims is 65, but it can affect all ages.

**Why are AEDs important in the workplace?**

For every minute that passes without defibrillation of a heart in ventricular fibrillation, a victim's chance of survival decreases 7-10%, therefore, the faster the response time, the greater the victim's chance of survival. SUNY ESF presently has 26 AED’s strategically placed on its campuses to minimize response times.
The foundation of the CPR / AED Program is training for certified responders who can perform CPR and operate an AED in the event of a medical emergency. All ESF CPR / AED responders must complete a certified AED/CPR program, and quarterly updates.

The Environmental Health & Safety Office offers this training to any ESF employee interested in becoming a CPR / AED responder. If you are interested in becoming a CPR / AED responder, please watch for email messages listing training opportunities and contact EH&S Office at 470-6896 or jrwasiel@esf.edu.