New AED program at JSC to combat cardiac arrest

Every year, about 250,000 Americans die from sudden cardiac arrest, roughly the population of a medium-sized city. However, recent measures taken by the Occupational Health and Test Support Office should help keep JSC employees from becoming statistics.

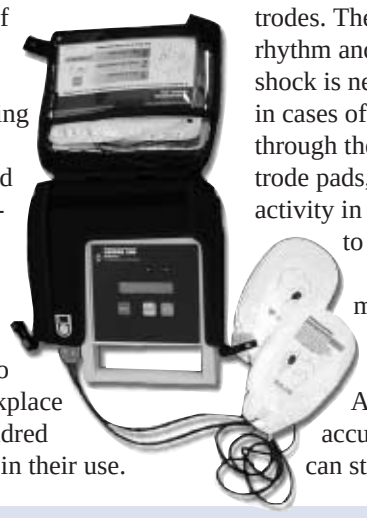
Most cases of cardiac arrest are caused by ventricular fibrillation (VF), a disorder in which the rhythmic beating of the heart's lower pumping chambers become chaotic and prevent the heart from pumping blood. Defibrillation is the only technique that is effective in returning a heart in VF to its normal rhythm.

Thanks to innovative technology, trained non-medical personnel using an Automated External Defibrillator (AED) can perform defibrillation. The sooner defibrillation is provided the better the victim's chance of survival. In cases of cardiac arrest, every minute of delay decreases the chance of survival by 10 percent. After as little as 10 minutes very few resuscitation attempts are successful.

To aid JSC employees in the event of a sudden cardiac arrest, the JSC Occupational Health and Test Support Office recently completed the final phase of the "Got the Squeeze, Call the 33333's" heart disease awareness campaign.

The campaign included the deployment of AEDs across the Johnson Space Center. The first two phases of the campaign increased the number of trained personnel who can recognize the symptoms of sudden cardiac arrest and who are aware of the steps that need to be taken.

The most recent phase of this program–deployment of AEDs across the Center–has just been completed. It included placing 46 AEDs throughout JSC, Ellington Field and the Sonny Carter Training Facility. The location of these AEDs is shown below.



JSC is among the first government sites to place AEDs in the workplace and to train several hundred non-medical personnel in their use. During standard business hours, JSC clinic ambulances respond with advanced cardiac life support anywhere on-site.

The placement of AEDs in workplaces with high numbers of people and risk shortens the response time in cardiac cases. It also increases the chance of survival, providing care until the trained medical personnel arrive.

How does an AED work? A microprocessor inside the defibrillator interprets the victim's heart rhythm through electrodes. The computer analyzes the heart rhythm and advises the operator when a shock is needed. AEDs advise shock only in cases of VF. The current is delivered through the victim's chest wall via electrode pads, stopping abnormal electric activity in the heart. This allows the heart to resume normal function.

The AED, designed for non-medical people, is user-friendly and provides voice prompts to guide the user in operation. Although greatly simplified for accuracy and ease of use, an AED can still post risks if used improperly. AEDs are prescription devices for operation only by individuals who have received proper training, and within a system that integrates all aspects of care, from first response to the hospital.

The AED is now recognized as one of the most important life-saving devices available. The ease of its use by properly trained individuals has given rise to Public Access Defibrillation (PAD) programs. As a result, AEDs are being placed in many federal government and public facilities, including airports such as Chicago O'Hare and San Francisco. All major airlines now carry AEDs in their aircraft.

To provide round-the-clock, daily coverage onsite, the JSC Fire Protection Specialists have been trained and carry AEDs in their vehicles to respond to all emergencies directed through the JSC "33333" emergency response network.

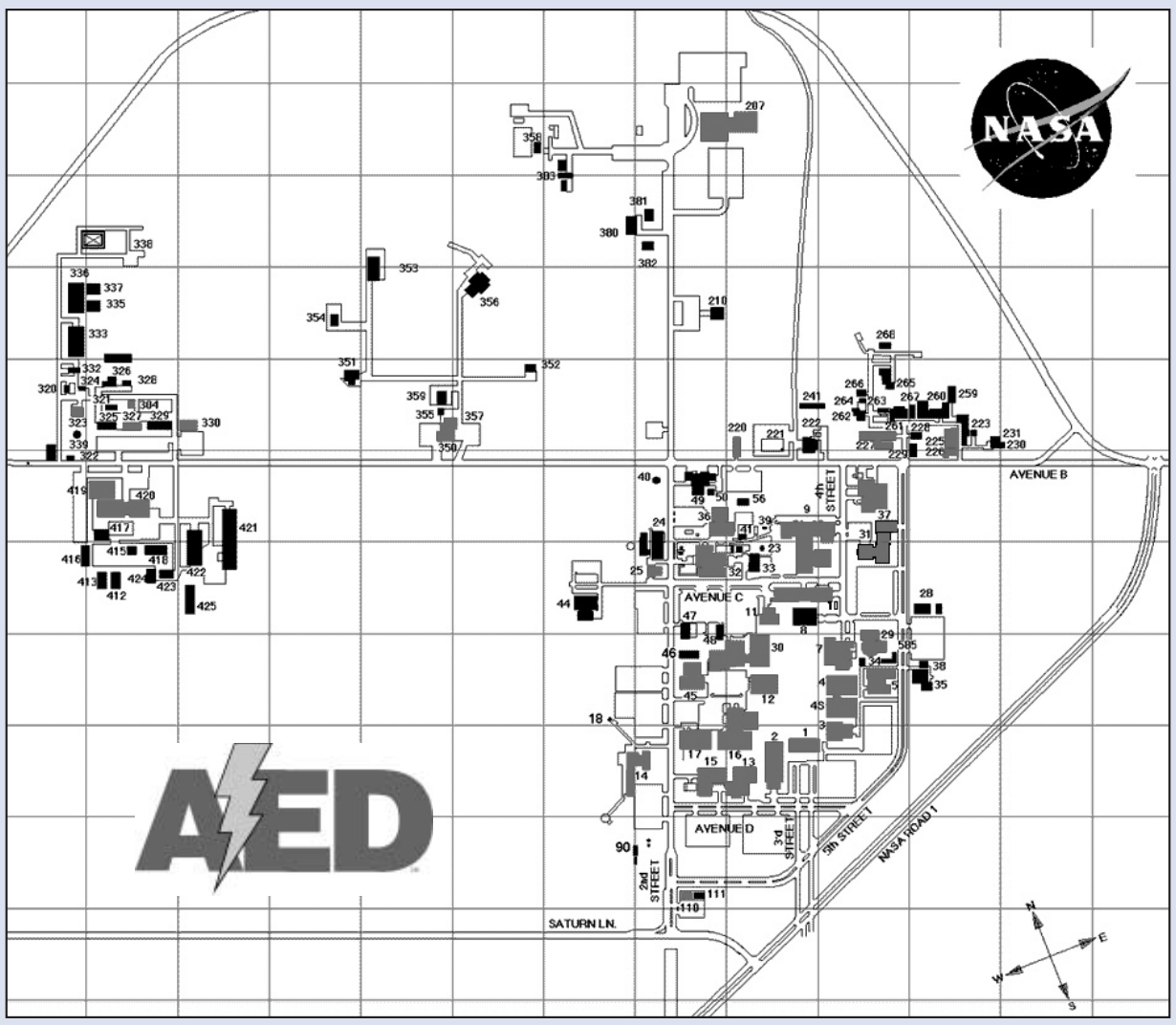
If you have any additional questions or would like more information on AEDs, please contact Angel L. Plaza at the Occupational Health and Human Test Support Office, x37305, or Kelsey-Seybold's Mike Fox at (281) 792-5724. ■

AED PLACEMENT AT JSC

Building	Location
Bldg 1	1st Floor next to RM 105 8th Floor next to RM 850
Bldg 2 North	Lobby next to RM 135
Bldg 3	Food entry way by bulletin board
Bldg 4 South	2nd Floor next to RM 2327 3rd Floor next to RM 3801
Bldg 4 North	2nd Floor next to south elevator
Bldg 5	CIM control
Bldg 7	Building 7A lobby
Bldg 9	O.C.C.
Bldg 10	Next to RM 100 High Bay
Bldg 11	North wall by exchange Service
Bldg 12	2nd Floor outside RM 298
Bldg 13	North lobby right wall
Bldg 14	Hallway next to RM 106
Bldg 15	Main lobby left wall by phone
Bldg 16	Outside RM 102
Bldg 17	Main lobby left wall
Bldg 25	Two fire response trucks
Bldg 30A	RM 2085 Hallway
Bldg 30 South	1st Floor RM 30M 2nd Floor RM2315 Canteen area
Bldg 31	Main lobby front wall
Bldg 32	Entry way chamber "A" high bay
Bldg 36	Lobby area by canteen machines
Bldg 37	Main lobby right side by phone
Bldg 44	Main lobby left side by phone
Bldg 45	1st Floor lobby left side by pay phone 5th Floor by elevators
Bldg 110	Lobby area behind desk
Bldg 207	Administration area, on wall behind counter
Bldg 220	Temporary wall in lobby
Bldg 226	Fire extinguisher cabinet in hallway
Bldg 227	Print shop hallway fire station
Bldg 323	Lobby next to RM 102
Bldg 330	Main door entrance left side
Bldg 350	Entrance door outside RM 140
Bldg 419	Hallway between Buildings 419 & 420

ELLINGTON FIELD AIR OPS
Maintenance Center, hanger 276 NBL 920N
Emergency Treatment Room RM 1337D

Note: Two AEDs at White Sands and El Paso



If you suspect that someone is having a heart attack, here is what you should do:

1. Call 33333 at JSC (44444 at Ellington), activate the emergency medical services and send someone to get the AED.
2. Locate an AED Operator. You will know by the logo on their door or by the list near the AED.
3. Trained CPR responder should initiate the steps of CPR as necessary.
4. AED operator should connect the AED to the patient if they are not breathing, not responsive and no pulse is detected.