MEDICAL SAFETY CONSIDERATIONS & RECOMMENDATIONS FOR USE OF DEFIBRILLATORS AT PUBLIC VENUES
300,000 PEOPLE DIE FROM HEART FAILURE EVERY YEAR
In Europe, approximately 300,000 people are the victims of sudden cardiac death every year. It is consequently the leading cause of death - ahead of both cancer and strokes. This figure could be significantly reduced if public facilities, fitness centres, care homes, companies, training institutes and private households were equipped with automatic defibrillators (PAD, AED, AS). If help is not provided immediately, sudden cardiac death can occur within minutes.

VENTRICULAR FIBRILLATION CAN AFFECT ANYONE
Ventricular fibrillation can be the cause of sudden cardiac death in early life or even occur without warning at any time. Not enough is known about some of the scientific reasons behind it. Initial care of the patient includes cardiopulmonary resuscitation (CPR). However, this alone will not stop ventricular fibrillation. Ventricular fibrillation can only be effectively stopped by prompt defibrillation - in other words, a current controlled defibrillation impulse from what is known as an automated external defibrillator (AED).

FAST ACTION SAVES LIVES
In conjunction with immediate cardiopulmonary resuscitation, there is only one way of stopping ventricular fibrillation and ensuring the patients survival: prompt defibrillation. It has been proven that a patient’s chance of survival falls by 10% - 12% per minute.

- CHANCE OF SURVIVAL *-

100-70%  
70-50%  
< 50%

* Source: ERC GUIDELINE 2010: CARDIOPULMONARY RESUSCITATION

EASY FOR LAYPEOPLE TO USE
A patient’s chance of survival decreases with every minute. That’s why we have specially developed our range of defibrillators for first aiders with laypeople in mind. You can provide professional assistance without any medical training in just a few simple steps. You can’t go wrong: the device only initiates defibrillation when ventricular fibrillation is actually verified. Simple voice prompts safely guide the first aider/layperson through the rescue procedure.
IS THERE ANY GUIDANCE FOR VENUES AS TO DEFIBRILLATORS?
There exists various guidelines from responsible associations as to safety and risk assessment and most make note that a defibrillator should be located at public venues. However it is after this that it all gets a bit grey and unclear. You need to carry out an appropriate risk assessment of first aid needs for your particular environment.

DO WE NEED DEFIBRILLATORS AT OUR VENUE?
Although there is no mandatory requirement to provide a defibrillator, it’s a safety device and definitely advisable in public places where you have large numbers of spectators and staff, in particular if they are likely to be older than 50 to have the necessary safety equipment in place. It is published that emergency services take on average at least 10 to 15 minutes to reach the scene of an emergency from initial call! In life threatening situations, such as a Sudden Cardiac Arrest, without treatment the patient only has a few precious minutes left for a chance of survival! Public access defibrillators (AED) in work and public places, have potential to increase survival outcome.

IS INSTALLING DEFIBRILLATORS SAFE AND ARE THEY EXPENSIVE?
Defibrillators (AED’s) are designed to be safe and should always meet the European Resuscitation Council (ERC) guidelines which are required for use. The cost of professional ERC compliant AED’s is relatively low and they are probably low enough to be insignificant to large businesses and organisations - it’s a safety device.

HOW MANY DEFIBRILLATORS SHOULD WE HAVE?
The quantity depends on the numbers of spectators and staff at your venue and accessibility. If you decide the risk is sufficient to warrant defibrillators to provide the safety cover, then the appropriate number depends on the assessment findings and the number of first aid responders on site. Of paramount importance is where the time from initial call out of the conventional ambulance service to delivery of defibrillation equipment to a patient, is not reliable within five minutes. So the quantity required will depend on accessibility, people at the venue and your first aid/medical support.

WHERE SHOULD WE PLACE DEFIBRILLATORS?
In accessible areas. As a general rule if the defibrillator cannot be used on a patient within five minutes, then its located too far and deemed inaccessible and will greatly reduce the patients chances of survival. The defibrillators must be in an easy accessible location throughout the venue and accessible within five minutes from each area of your venue, this will help determine how many you should deploy.
WHERE CAN WE GET ADVICE ON INSTALLING DEFIBRILLATORS?
It is important to carry out a site audit, taking into consideration access and numbers of trained first aiders, medical staff and any contracted paramedics/ambulance staff on site. The audit can be carried out with companies specifically trained in medical devices, health and safety and the use thereof. You should always consult a professional company who is knowledgeable in both medical use of defibrillators and health and safety risk; e.g. companies such as; MEDACX who can advise on the use of defibrillators, physical locations and training required.

DOES HAVING A DEFIBRILLATOR EFFECT OUR HEALTH & SAFETY POLICY?
If you provide an automated external defibrillator (AED) at work for use by staff, it comes under the Provision and Use of Work Equipment Regulations. This means that failing to maintain it and failing to train people who use it would breach requirements.

WHAT'S THE CHANCES OF SOMEONE HAVING SUDDEN CARDIAC ARREST?
You have no knowledge or prior warning, Sudden Cardiac Arrest (SCA) can happen in early life or even occur without warning at any time. Despite facts that state the crucial risk threshold for males is 55 or older and 96% of cardiac events and strokes occur above the age of 55, one could assume therefore the likelihood of an SCA is probably low, however statistics have shown this not always to be the case!

WHAT ABOUT TRAINING AND SUPPORT?
AED's are only part of a resuscitation programme; you should not use them in isolation and you must provide training for anyone required to use them. Training courses are available that cover use of AED's specifically and refresher courses are advisable every 12 months. Most organisations will have a mix of trained first aiders, ground staff and will augment this through contracting external trained paramedics, ambulance organisations or medical staff to cover their medical and safety requirements. Companies such as MEDACX and external medical trainers can tailor packages to suit your needs.

HOW CAN MEDACX HELP?
For further information, help or advice on defibrillators, their use, your venue, training and support please contact us on:

02392 469737 or email us at info@medacx.co.uk