

17th September 2007

Access to Community CPR and Defibrillators

One in five deaths annually in Ireland is attributable to coronary artery disease. Of these, over 5,000 per year are sudden cardiac deaths i.e. deaths attributable to cardiac causes which occur within one hour of the onset of symptoms. The majority of these occur with little or no warning so prompt recognition and early treatment are critical to survival. Each minute of delay to provision of Basic Life Support (BLS) and defibrillation reduces the chance of survival by 10-15% ⁽¹⁾. The international resuscitation community has identified the "chain of survival" for these patients. This consists of

- Early recognition and call for help
- Early BLS
- Early defibrillation
- Post-resuscitation care.

Early resuscitation and prompt defibrillation (ideally within 1-2 minutes) can result in significantly improved survival rates. Over three quarters of these deaths occur in the home, with a further 10-15% in the workplace or street ⁽²⁾. Therefore realisation of these targets in such a short time frame can best be delivered if these interventions are delivered by family, friends or bystanders while the emergency services are en route to the patient. In most of these patients the window of opportunity to deliver BLS and defibrillation has passed when the emergency services arrive at the patients side and despite the best efforts of the paramedics and the Emergency Department staff, the outcome is all too often fatal.

The Irish Association for Emergency Medicine (IAEM) supports the establishment of community based BLS and defibrillation initiatives. Such programmes increase the likelihood of members of our communities receiving the care that they need as soon as they need it. BLS is an easily acquired skill and can be mastered in a very short space of time. Automated external defibrillators (AEDs) are specifically designed to be safely used by those with little or no health care training and when used at the right time can, quite literally, save a life.

President:

Mr Fergal Hickey FRCS, FRCSEd.(A&E), DA(UK), FCEM
Consultant in Emergency Medicine

Sligo General Hospital
The Mall
Sligo
Ireland

Tel no: +353 71 9174505
Fax no: +353 71 9174646

Secretary:

Mr James Binchy FRCSEd.(A&E), Dip.Med.Tox., FCEM.
Consultant in Emergency Medicine

University College Hospital,
Newcastle Road
Galway
Ireland

Tel no: +353 91 542766
Fax no: +353 91 520154

Treasurer:

Dr Una Geary FRCSEd.(A&E), FRCPI, FCEM
Consultant in Emergency Medicine

St James's Hospital
James's St,
Dublin 8
Ireland

Tel no: +353 1 4103581 / 4162777
Fax no: +353 1 4103451

The Department of Health and Children established the *Task Force on Sudden Cardiac Death* in 2004 and its report was published in March 2006. It has made a number of key recommendations on this topic ⁽²⁾. In particular it has recommended the following:

- BLS and AED training be regarded as essential for all health care professionals
- BLS and AED training be provided for family members of those who have suffered a non-fatal cardiac event or are at high risk of sudden cardiac death.
- BLS and AED training be on the primary and post-primary school curriculum.
- AED training be a requirement for occupational first aid training
- First responder schemes linked to the emergency medical services be established

The task force also recommends that AEDs be placed in facilities where the incidence of cardiac arrest is high, including

- inpatient health facilities
- GP surgeries
- airports, bus/rail terminals and ferries/ferry terminals
- shopping centres
- major sports venues
- concert and conference venues
- universities and colleges
- gyms and fitness clubs
- other venues for major public events

This Association also believes that all airlines operating flights to, from and within Ireland should be required to provide staff trained in basic life support and defibrillators on their aircraft.

The IAEM notes that the Department of Health has established a group to implement the Task Force Report and looks forward to the speedy implementation of the recommendations, which it believes will result in improved outcomes in cases of sudden cardiac arrest.

The Association also welcomes the establishment of an out-of-hospital cardiac-arrest register in NUI, Galway with the support of the Pre-Hospital Emergency

Care Council. This will provide a database of information relating to all sudden cardiac deaths in Ireland that will allow the provision of services in line with the recommendations.

There are 14 victims of sudden cardiac death in Ireland every day. By the time these patients are treated in hospital Emergency Departments by the IAEM's members, it is, all too often, too late. We look forward to the day that our members are treating the survivors of community delivered BLS/defibrillation rather than the victims of sudden cardiac death that have not received the prompt treatment that they require.

References

- 1 Guidelines for Resuscitation 2005. Section 2 *Adult Basic Life Support and use of Automated External Defibrillators*. Handley AJ, Koster R, Monsieurs K, Perkins GD, Davies S and Bossaert L. **Resuscitation** (2005) 67 S1, S7-23.
- 2 *Reducing the Risk; A Strategic Approach*. Report of the Task Force on Sudden Cardiac Death. Department of Health & Children. March 2006