

# **GUIDELINES FOR ACCREDITATION OF AUTOMATED EXTERNAL DEFIBRILLATION TRAINING CENTRE (AED TC)**

## **Aims and Objectives**

To set up a system for maintaining consistent standard of teaching the Automated External Defibrillation (AED) course by recommending for accreditation of AED Training Centres (AED TCs) to achieve the following objectives:

1. To ensure that syllabus for teaching the use of AED fulfills minimum standards set by NRC, at the least.
2. To ensure that AED instructors maintain their competency in the teaching of AED Courses.
3. To ensure a mechanism for the accreditation of AED Training Centres / Courses.

Competency is defined as having updated knowledge of AED and the appropriate skills in teaching the AED course.

## **Recommended Guidelines for Accreditation of AED TC:**

### **1 Mission and Objectives**

- 1.1 The mission and objectives of the AED TC should be defined when applying to the National Resuscitation Council (NRC).

### **2 Policies**

- 2.1 The AED TC should :
  - follow the policies and guidelines set by the NRC to guide its training activities and in the management of the AED TC &
  - monitor all activities to ensure that they are consistent with the policies and guidelines.

### **3 Staffing and Instructors**

- 3.1 The TC should state the necessary qualifications of the Instructors and the method of appointing or selecting them.
- 3.2 Every AED Training Centre should have an AED Director.
- 3.3 The designated Director of AED TC has the overall responsibility to
  - ensure that all AED instructors update and enhance their knowledge and skills in AED usage &
  - review the standard AED Programs or CPR+AED programs conducted at his/her Training Centre and ensure compliance to NRC guidelines
- 3.4 Criteria for Appointment of Chief Instructor (CI) :
  - Every AED or CPR+AED Provider Course should have one Chief Instructor.
  - An AED / CPR+AED Chief Instructor must have been an active AED Instructor for at least three years before being appointed as Chief Instructor.

- The Chief Instructor is nominated by the AED Director of the AED Training Centre and has to be accepted by the training centre.
- The Chief Instructor should personally oversee the conduct of the AED or CPR+AED Provider Course under his/her purview.

### 3.5 Criteria for Appointment of Instructors :

- The person must have successfully completed an NRC accredited AED Course or CPR+AED course or its equivalent before being eligible to go through an AED Instructor Course or CPR+AED instructor course, respectively.
- Trainee AED Instructors should successfully complete an NRC-accredited AED Instructor Course and instructed in at least two AED Provider Courses within one year of completing the Instructor's Course before being eligible for certification as an AED Instructor. The equivalent would hold true for CPR+AED instructors.
- Certification as an AED / CPR+AED Instructor is valid for as long as the person continues to instruct in at least two AED / CPR+AED Provider Courses per annum.
- Every AED / CPR+AED Provider Course should have no fewer than 1 AED Instructor for every 6 AED trainees with one manikin and 1 AED.

## 4 Programme and Contents

4.1 Course Content : The contents of the training should adhere to the recommended AED teaching guidelines.

4.1.1 The minimum syllabus for conduct of any AED Course should cover both general topics pertaining to automatic electrical cardiac defibrillation and also topics specific to the model of AED being taught.

4.1.2 Please see attached for recommended topics.

4.2 Programme : The programme should be properly spelt out and communicated so that trainees know what to expect and be appropriately prepared for the course.

4.3 Course Materials : The TC should adopt appropriate manuals which are written in accordance to NRC recommended AED / CPR+AED teaching guidelines. Such training manuals will, therefore, need to be submitted to NRC for review and approval.

4.4 Course Materials: The training centre should send course materials to course participants at least two weeks prior to the start of the course. This is to ensure that participants will have ample time to read and prepare for the course.

4.5 After the syllabus topics have been covered, evaluation of candidates should be by conduct of tests on the theory and practice of AED. These tests should consist of the following:

#### 4.5.1 Theory Test

- Passing mark should be 80%.
- Multiple choice questions (10 for laypersons and at least 20 for Medical / Paramedical staff in case of AED courses and at least 20 in-total in the case of CPR+AED courses).

4.5.2 Scenario-based Practical Tests with scenario-checklists. Participants must perform all the major required steps, failing which they may be subject to retest.

4.5.3 The NRC will set up a bank of questions for the conduct of the theory and practical tests.

- 4.5.4 AED Training Centres may come out with their own scenarios for testing. This should be prior vetted by NRC (AED Sub-committee).
- 4.5.5 AED Courses may be conducted together with CPR courses (referred to as CPR+AED courses) or as stand-alone courses.
- 4.5.6 For stand-alone AED courses, a candidate has to be currently Basic Cardiac Life Support (BCLS) or Heartsaver certified or willing to simultaneously undergo CPR training by an NRC-accredited institution or equivalent. Such equivalence must be recognised by the NRC.
- 4.5.7 For CPR+AED courses, no such pre-requisites exist.

## **5 Facilities and Equipment**

- 5.1.1 Any institution designated as an AED Training Centre has the responsibility to provide appropriate facilities and equipment to facilitate the training.
- 5.2 The TC should have sufficient adult manikins, defibrillators and other accessories in good working condition to be used during training.
- 5.3 There should not be more than 6 trainees using 1 manikin. The ratio of manikin to trainee should not exceed 1:6.
  - 5.3.1 The maintenance and disinfecting of the manikins should be carried out in accordance to the recommended safety measures.

## **6 Records**

- 6.1 The AED Training Centre is to maintain a registry of certified trainees. Accurate and complete training records and attendance list of trainees and instructors should be kept.
- 6.2 Essential information, e.g. Trainees' Name, NRIC/ Passport Number, Organisation, Date of course, Date of Expiry of AED / CPR+AED Certificate and Certificate Number must be kept.
- 6.3 Each training centre should maintain its own registry of Chief Instructor(s) and Instructors and their participation in training activities.

## **7 Certification**

- 7.1 Trainees who successfully complete the training should be issued Certificates with the date of issue and date of expiry clearly indicated. The Chief Instructor must sign the certificate.
- 7.2 The AED certificate or CPR+AED certificate should be valid for a period not exceeding 2 years.
- 7.3 The trainee's certification will only be renewed if he / she attends an AED / CPR+AED Re-certification course within a year upon expiry of the AED or CPR+AED certificate.

## **8 Evaluation of AED Training Programme**

- 8.1 There should be evaluation procedures by which the standards of the training programme are assessed and maintained.
  - 8.1.1 The procedures should enable data obtained from evaluation to be used effectively for the on-going improvement of training in AED / CPR+AED courses. It is recommended that the centre maintain records of feedback and evaluation for referral purposes.

- 8.2 The evaluation tools and methods should be reviewed regularly and revised according to current developments in this field.
- 8.3 Chief Instructor and Instructors should participate in the formulation of plans to overcome any identified deficiencies in the service.
- 8.4 The Training Centre should submit to NRC its schedule of AED / CPR+AED Provider Courses at least one month in advance. This will enable NRC to conduct random audits.

**Recommended Minimum Content for stand-alone AED courses:**

**General Topics**

1	<ul style="list-style-type: none"> <li>• Programme Objectives &amp; Schedule</li> <li>• Theory &amp; Practical Assessment criteria</li> <li>• Safety Rules</li> </ul>	Min 10 minutes
2	Demonstration of AED, including: <ul style="list-style-type: none"> <li>• Features of AED / Pad placement</li> <li>• AED Operational Steps</li> </ul>	Min 20 minutes

**AED-Specific Topics**

1	Practical Training with hands-on training of: <ul style="list-style-type: none"> <li>• Adult one man CPR with AED scenarios</li> <li>• Pad Placement</li> <li>• Ratio of Instructor / Manikin / Trainee = 1: 1: 6</li> </ul>	Min 100 minutes (20 min / pax contact time)
2	Debrief and Results	Min 10 minutes

**Recommended Minimum Content for CPR+AED courses:**

Topic	Time	Content Details
Introduction	10 min	<ul style="list-style-type: none"> <li>• Programme Objectives</li> <li>• Theory &amp; Practical assessment criteria</li> <li>• Safety rules</li> </ul>
Demonstration of CPR+AED	45 min	<ul style="list-style-type: none"> <li>• Step-by-step adult 1-man CPR technique</li> <li>• Features of AED</li> <li>• Pad placement</li> <li>• AED operation steps &amp; troubleshooting</li> </ul>
Practical Training	100 min	Hands-on training of: <ul style="list-style-type: none"> <li>• Adult 1-man CPR with AED scenarios</li> <li>• Ratio of instructor:manikin:trainee = 1:1:6</li> </ul>
Theory & Practical Testing	70 min	<ul style="list-style-type: none"> <li>• Theory (MCQ: 10 x CPR, 10 x Defib)</li> <li>• Practical testing with separate retesting scenarios</li> <li>• Retest for failures up to 3 times (max)</li> </ul>
Debrief and Results	5 min	Results & Presentation of certificates & Feedback
Total	3 hrs 50 min	

*(Please note that the above guidelines are subject to change).*