AUSTRALIAN RESUSCITATION COUNCIL

NEW ZEALAND Resuscitation Council
Whakahauora, Aotearoa

GUIDELINE 10.1

BASIC LIFE SUPPORT TRAINING

INTRODUCTION

Participation in Basic Life Support training courses is known to increase bystander CPR and improve the outcomes of victims. The Guidelines in this manual are based on the best evidence available combined with the educational premise that "simple is best". The trainers/facilitators of resuscitation techniques should base their teaching on the target audience and their educational needs and/or practice requirements. Therefore some interpretation of the guidelines may be necessary to ensure that simple, sensible resuscitation practices are taught and learned.

Regardless of the recency of CPR training or re-training, any attempt at resuscitation is better than no attempt and should be encouraged.

Training organisations are required to assess CPR competence. Assessors need to be cognisant of the intent of the resuscitation community that any attempt at resuscitation is better than no attempt. As such, assessment should focus on adequate CPR and not on the technicalities of achieving set figures or rates. [Class A; LOE Expert Consensus Opinion]

Primary school age children are able to perform age appropriate Basic Life Support skills effectively when attention is given to the context in which these skills are introduced and how the skills are taught. Comparable knowledge and psychomotor skills are taught to children of this age and retained, with subsequent demonstration of effective performance. Other successful examples include teaching of skills related to most games and the teaching of safety knowledge and skills when travelling to and from school.[1,2][Class A; Expert Consensus Opinion]

The Australian Resuscitation Council and New Zealand Resuscitation Council believe that organisations and individuals experienced in resuscitation training are best positioned to contextualise the above principles into their training programs.

RECOMMENDATIONS

- Learning objectives for training must include the following: recognition of an emergency, ability to call an emergency response number, competence in chest compressions, rescue breathing, use of an automated external defibrillator, and emotional preparation for the capability to act in an emergency[3].

- At a minimum, mouth to mouth rescue breathing must be taught and assessed (in conjunction with the learning objectives outlined above), in any training program
- Training with social support reduces family member and patient anxiety and improves emotional adjustment and increases feelings of empowerment.[3] [Class A; LOE II, III-1, IV, extrapolated evidence]
- Access to training courses or self-instruction must be readily available in the community.[4]
- The definition of specific characteristics and needs of each training group should be an initial step in all curriculum development.[4]
- The use of realistic techniques (e.g. video-assisted instruction) to improve outcomes should be considered.[3] [Class B; LOE II, III-1, III-2, IV]
- CPR training and actual performance is safe in most circumstances. Individuals undertaking Basic Life Support training should be advised of the nature and extent of the physical activity required during the training program. Learners who develop significant symptoms (e.g. chest pain, severe shortness of breath) during CPR should be advised to stop.[3] [Class A; LOE IV, extrapolated evidence]
- Initial training must always include specific plans for refresher training. [Class A; LOE VI]
- The optimal duration of an instructor-led basic life support course has not been determined.[3] [Class B; LOE II, III-1] At the completion of the course learners must be able to physically demonstrate CPR skills and knowledge on a manikin. Solely computer based systems do not fulfil this requirement. [Class A; LOE IV]
- Training should take place in an environment that is comfortable for learners and should use instructional methods that learners understand. [Class A; LOE IV]
- Trainers/facilitators (for courses for laypersons or healthcare professionals) must have received appropriate instruction in facilitation of learning and must attend training / facilitation updates on a regular basis [Class A; LOE IV]
- Research in Basic Life Support training must be encouraged, developed and integrated into practice where appropriate. [Class A; Expert Consensus Opinion]
- The educational efficacy of new course content or methods must be demonstrated before the course is widely conducted. [Class A; Expert Consensus Opinion]
- CPR prompt/feedback devices may be considered during Basic Life Support training and in clinical use as an overall strategy to improve the quality of CPR.[3] [Class B, LOE III-1, III-2, III-3, extrapolated evidence]
- Prompt devices may include a signal to perform an action (e.g. metronome for compression rate) and feedback after-event-information based on effect of an action (e.g. visual display of compression depth).[3]

CPR RECERTIFICATION

- The optimal interval for retraining has not been established, but repeated refresher training is needed for individuals who are not performing resuscitation on a regular basis.[3] [Class A; LOE IV]
- All those trained in CPR should refresh their CPR skills at least annually. [Class A; Expert Consensus Opinion]

REFERENCES

1. Jacobs, I and Kroll, L. 1997 Development of strategies to encourage the teaching of cardio-pulmonary resuscitation in schools and workplaces The Australian Resuscitation Council and the School of Public Health, Curtin University of Technology.
2. Lester, C; Weston, C; Morgan M; Donnelly, P; Assar, D 1994. The Headstart school programme: teaching cardiopulmonary resuscitation to schoolchildren. Health Education Journal 53, pp454-461.
3. Soar J, Mancini ME, Bhanji F, Billi JE, Dennett J, Finn J, Ma MHM, Perkins GD, Rodgers DL, Hazinski MF, Jacobs I, Morley PT, on behalf of the Education, Implementation, and Teams Chapter Collaborators. Part 12: Education, implementation, and teams: 2010 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science with Treatment Recommendations. Resuscitation 2010;81:e288–e330.
4. International Liaison Committee on Resuscitation. Education in Resuscitation. Resuscitation 2003; 59: 11-43 http://www.resuscitationjournal.com

LEVEL OF EVIDENCE

Level III-2, III-3
Level IV
Expert Consensus Opinion

CLASS OF RECOMMENDATION

Class A – Recommended

FURTHER READING

ARC Guideline 7 External Automated Defibrillation (AED in Basic Life Support (BLS)
ARC Guideline 8 Cardiopulmonary Resuscitation
ARC Guideline 10.3 Cross Infection Risks and Manikin Disinfection