

Emergency First Response Article Excerpts

Training Bulletins First Quarter 2016 to First Quarter 2019

First Quarter 2016

New CPR Guidelines for EFR and PADI Courses

Member organizations of the International Liaison Committee on Resuscitation (ILCOR) have begun to release new cardiopulmonary resuscitation (CPR) and emergency cardiovascular care (ECC) guidelines.

Emergency First Response® (EFR) and PADI courses follow these guidelines and implement changes whenever protocols are revised. The latest updates from ILCOR indicate relatively small changes to the way CPR and first aid is conducted by lay-people; this is a reflection of the success of CPR in modern times. Please update your Emergency First Response courses to including the following information:

CPR

- ◆ Perform chest compressions at a rate of 100 – 120 per minute for adult, child, and infant.
- ◆ Perform compressions to a depth of 5 centimetres/2 inches for an average adult while avoiding excessive chest compression depths (greater than 6 centimetres/2.4 inches).
- ◆ Do not interrupt chest compressions for more than 10 seconds.
- ◆ Always call EMS immediately for anyone with chest pain or other signs of a heart attack, rather than trying to personally transport the person to a healthcare facility.

The use of mannequins that provide feedback on depth and rate of compressions is now encouraged.

However, other mannequin types are still acceptable. Also, consider using auditory guidance (metronome or music) to improve compression rate.

Diabetic Problems (low blood sugar, hypoglycemia)

- ◆ If a person with diabetes reports low blood sugar or exhibits signs or symptoms of mild hypoglycemia and is able to follow simple commands and swallow, **oral glucose should be given to attempt to resolve the hypoglycemia**. If these tablets are not available, you may provide the patient with fruit juice, soda or candy if available.
- ◆ Symptoms may not resolve until 10 to 15 minutes after ingesting glucose tablets or dietary sugars. Emergency responders should wait at least 10 to 15 minutes before calling EMS and retreating a diabetic with additional oral sugars. If the diabetic's status deteriorates during that time or does not improve, call EMS.

Serious bleeding

- ◆ **A tourniquet may now be considered for initial care when an emergency provider is unable to use direct pressure to control bleeding**, such as during a mass casualty incident, with a person who has multisystem trauma, in an unsafe environment, or with a wound that can't be accessed. Tourniquets can be effective for severe external limb bleeding.
- ◆ Note the time that a tourniquet is first applied and communicate this information to EMS providers. Tourniquets use in the prehospital setting have been found to control bleeding effectively in most cases and have a low rate of complications.

Burns

◆ **If cool or cold water is not available, a clean cool or cold but not freezing, compress can be useful as a substitute for cooling burns.** Care should be taken to monitor for hypothermia when cooling large burns.

You can implement these changes into your course immediately. The required implementation is no later than 31 March 2016. To keep EFR and PADI courses current and internationally applicable, course materials are being revised to reflect these recent guidelines.

To assist you in updating your EFR knowledge and teaching techniques, you'll find a series of pre-recorded webinars that are free of charge and available in a range of languages on the EFR and PADI Pros' Sites.

As other resuscitation council national guidelines are released, you will find more detailed information about them and how they apply to EFR and PADI courses in *The Responder*.

For detailed references, see the full 2015 American Heart Association Guidelines for CPR and ECC and the ILCOR document in the journal *Circulation* at circ.ahajournals.org/content/132/16_suppl_1.toc, and view the ERC Guidelines 2015 at www.cprguidelines.eu/.

Second Quarter 2016

EFR Guidelines 2015 Update Australia and New Zealand

Following the release of the 2015 guidelines for CPR and emergency cardiovascular care by the International Liaison Committee on Resuscitation (ILCOR) the Australian and New Zealand Committee on Resuscitation (ANZCOR) released its new guidelines mid-January 2016. These now replace all earlier existing Australian and New Zealand Resuscitation Council guidelines and are endorsed by both councils.

With this new release, the only change to ANZCOR basic life support guidelines is related to the rate of chest compressions, which changed from approximately 100 to a range of 100 - 120 compressions per minute.

For detailed references on the new ANZCOR guidelines please refer to resus.org.au when teaching in Australia and to nzrc.org.nz when teaching in New Zealand.

As announced in First Quarter 2016 *Training Bulletin*, PADI, EFR and RTO materials are being revised to reflect all recent changes. Remember, the required implementation date of all new CPR and first aid guidelines was no later than 31 March 2016.

Third Quarter 2016

New Emergency First Response® Instructor Guide Errata Available

Make sure that your Emergency First Response (EFR) Instructor Guides are up-to-date by referencing the [2016 errata document](#) on the EFR and PADI Pros' Site. This document outlines changes to the instructor guides resulting from ILCOR Guidelines 2015. Related updates to the English version Emergency First Response Primary and Secondary Care student manuals are available now. The EFR Quick Reference Card, Care for Children manual and CPR/AED manuals will be updated soon.

Fourth Quarter 2016

Q. Emergency First Response® (EFR®) courses mention that if for some reason an emergency responder can't or won't provide rescue breaths in a real

emergency requiring CPR, giving compressions alone may still help. How does that relate to CPR given for drowning victims?

A. Giving rescue breaths is emphasized for drowning victims. Because lack of breathing due to drowning is often suspected in dive accidents, rescue breathing remains a key skill in diver rescue. The PADI Rescue Diver course teaches divers to provide inwater rescue breaths, and once on a stable platform, to start CPR – including both rescue breaths and compressions to aid nonbreathing dive accident victim. In many countries, protocol for suspected drowning is immediate CPR if possible; giving breaths first, followed by chest compressions.

Following base ILCOR recommendations, in other countries the local ILCOR representatives emphasize the need for rescue breathing with suspected drowning, but do not specify starting CPR with breaths. Experts in the medical community don't agree on how important giving breaths *first* is in drowning cases, but virtually all agree that beginning CPR (breaths and compressions) as soon as possible is important.

Giving chest compressions with rescue breaths continues to be the standard of care (best chance for successful outcome) for layperson CPR, which is why both skills are taught as a twostep CPR process in EFR courses. In any emergency with a nonbreathing patient, giving chest compressions alone is not ideal, but if for some reason the rescuer can't, or has fears about giving rescue breaths, then giving chest compressions alone is still considered beneficial.

Second Quarter 2018

United States Coast Guard Renews EFR® Recognition

Soon after Emergency First Response released the Primary and Secondary Care program in 2002, the United States Coast Guard (USCG) approved it to meet the first aid and CPR requirement for the USCG merchant mariner licensure. To maintain this approval, the USCG requires a program review every five years. The result of this re-evaluation extended USCG approval of EFR Primary and Secondary Care courses another five years to 28 February 2023.

To meet merchant mariner licensure requirements, Primary and Secondary Care training needs to be completed within one year of merchant mariner application. The student must be issued a certificate of training containing the following information:

- Name and code of the course as First Aid & CPR (Emergency First Response-Primary and Secondary, code- EMERFR-197)
- Name of the educational institution (Emergency First Response)
- Date of completion and location where the training was conducted
- Name of the student
- Signature of an authorized representative of the school (instructor's signature)

EFR Certificates (Product No. 40021) may be ordered through your local PADI/EFR Office to meet this need. EFR Instructors can take advantage of this approval by actively reaching out to those seeking CPR and first aid training to meet USCG licensure requirements.

In addition to this approval, EFR courses and programs have been rigorously evaluated by other respected third party authorities in a number of countries and achieved significant accreditation and approval. You can review a list of these recognitions at <http://www.emergencyfirstresponse.com/pros/accreditations.aspx> . To learn more about the United States Coast Guard go to www.uscg.mil.

Third Quarter 2018

EFR Primary and Secondary Care Participant Manual – Korean

Please note the following error in the EFR Primary Care Knowledge Review, Question 17, page 1-37 of the *EFR Primary and Secondary Care Participant Manual – Korean* (70370K Rev. 07/17 Version 1.02). The question should correctly ask: “Why is defibrillation important to a patient with cardiac arrest?” The answer choices and the answer key are correct.

Please make sure your students are aware of the correct text for this question, which, in Korean, should read:

17. 심장이 정지된 환자에게 제세동기가 중요한 이유는 무엇입니까?

The manual will be corrected upon reprint.

Fourth Quarter 2018

ILCOR CONSENSUS MARCH 2018

Emergency First Response and PADI courses keep pace with current research and treatment recommendations in emergency care. The most recent news indicates that no changes to CPR procedures are necessary in EFR courses. After reevaluation of science and research, the International Liaison Committee on Resuscitation's (ILCOR) most recent Consensus on Science and Treatment Recommendations do not include any changes to bystander CPR. ILCOR reaffirmed three areas of bystander treatment as published in the journal, *Resuscitation* 121 (2017) 201-214:

- *We continue to recommend that bystanders perform chest compressions for all patients in cardiac arrest. We suggest that bystanders who are trained, able, and willing to give rescue breaths and chest compressions do so for all adult patients in cardiac arrest.*
- *We suggest a compression/ventilation (CV) ratio of 30:2 compared with any other CV ratio in patients with cardiac arrest.*
- *We suggest that bystanders provide CPR with ventilation for infants and children less than 18 years of age with cardiac arrest. We continue to recommend that if bystanders cannot provide rescue breaths as part of CPR for infants and children under 18 years of age with cardiac arrest, they should at least provide chest compressions.*

First Quarter 2019

Immediate Feedback Devices in CPR Training

Q. May I use feedback manikins or devices that let students know if their compression rate and depth is appropriate in EFR® courses?

A. Absolutely. At least one resuscitation council, the American Heart Association, recommends the use of quality CPR feedback devices to learn adult CPR based on research. Though CPR skill repetition is essential, there is speculation that the use of feedback devices may reduce mastery time as participants self-correct in response to the device's real-time feedback. ILCOR Guidelines in recent years have re-emphasized compression rate, depth and recoil, which make these devices an interesting teaching aid for skill mastery evaluation. The important aspect of using manikins that provide immediate results on compression rate, depth and recoil in EFR courses is to do so in a reassuring way, so the competent-versus-perfect philosophy

outlined in the EFR Instructor course is not compromised. Keep in mind that CPR students often feel intimidated by the practical skills and can feel performance anxiety, particularly when they're not able to achieve great feedback results right away. Unless a level of comfort and support is achieved by the instructor in the CPR classroom, the participant's ability to learn and retain skills and be willing to offer them in an emergency can be severely reduced. However, used properly, compression feedback devices are a teaching tool that can effectively help EFR students bring their practical CPR skills in line with current compression rate, depth and recoil guidelines. A variety of feedback devices are available, some built into the manikin, and others can be added to and used with existing manikins.