

Chapter 1 : Basic Life Support (BLS)

The BLS Instructor-led course teaches both single-rescuer and team basic life support skills for application in both prehospital and in-facility environments, with a focus on High-Quality CPR and team dynamics. Online training with in-person skills session for CPR & psychomotor skills. HeartCode BLS.

Background[edit] Many countries have guidelines on how to provide basic life support BLS which are formulated by professional medical bodies in those countries. The guidelines outline algorithms for the management of a number of conditions, such as cardiac arrest , choking and drowning. Firefighters , lifeguards, and police officers are often required to be BLS certified. BLS skills are also appropriate for many other professions, such as daycare providers, teachers and security personnel and social workers especially working in the hospitals and ambulance drivers. CPR provided in the field increases the time available for higher medical responders to arrive and provide ALS care. This improves survival outcomes in cardiac arrest cases. In an emergency situation, due to illness medical emergency or trauma , BLS helps the patient ensure his or her own CABs, or assists in maintaining for the patient who is unable to do so. For breathing, this may include artificial respiration , often assisted by emergency oxygen. For circulation, this may include bleeding control or cardiopulmonary resuscitation CPR techniques to manually stimulate the heart and assist its pumping action. It includes cardiac arrest , respiratory arrest , drowning , and foreign body airway obstruction FBAO, or choking. Chain of survival[edit] The medical algorithm for providing basic life support to adults in the USA was published in in the journal Circulation by the American Heart Association. Early recognition of the emergency and activation of emergency medical services Early bystander CPR , so as not to delay treatment until arrival of EMS Early use of a defibrillator Early advanced life support and post-resuscitation care Bystanders with training in BLS can perform the first three of the four steps. Check for Danger Check for a Response Send or shout for help C directs rescuers to first attend to Catastrophic haemorrhage life-threatening bleeding and to stop the bleeding if possible. A directs rescuers to open the Airway and look into the mouth for obvious obstruction. B directs rescuers to check Breathing for 10 seconds by listening for breath at the patients nose and mouth and observe the chest for regular rising and falling breathing movements. C directs rescuers to maintain Circulation which may be through administration of chest compressions for Cardio Pulmonary Resuscitation CPR. D directs rescuers to identify Disabilities e. E directs rescuers to take the environment into consideration for weather, location and crowds. If the patient is unresponsive and not breathing, the responder begins CPR with chest compressions at a rate of beats per minute in cycles of 30 chest compressions to 2 breaths. If responders are unwilling or unable to perform rescue breathing, they are to perform compression-only CPR, because any attempt at resuscitation is better than no attempt. For children, for whom the main cause of cardiac arrest is from breathing related issues, 5 initial rescue breaths is highly advised followed by the same cycles. However, an online BLS course must be followed with an in-person skills session in order to obtain a certification issued by The American Heart Association. Ensure that the scene is safe. If no response call for help by shouting for an ambulance and ask for an AED. Transport if required, or wait for the EMS to arrive and take over. If patient is not breathing assess pulse at the carotid on your side for an adult, at the brachial for a child and infant for 6 seconds and not more than 10 seconds; begin immediately with chest compressions at a rate of 30 chest compressions in 18 seconds followed by two rescue breaths in 4 seconds each lasting for 2 second. Blind finger-sweeps are strongly discouraged and should never be performed, as they may push foreign objects further into the airway. This procedure has been discarded from current practice as this may push the foreign body down the airway and increase chances of an obstruction. Continue chest compression at a rate of compressions per minute for all age groups, allowing chest to recoil in between. For adults push up to Allow recoil of chest fully between each compression. In adults,irrespective of the number or rescuers, for every 30 chest compressions give two rescue breaths and in child victim, give 2 breaths per 30 compression if only 1 rescuer is present,but 2 breaths per 15 compressions in case where there are 2 rescuers. Continue for five cycles or two minutes before re-assessing pulse. Attempt to administer two artificial ventilations using the mouth-to-mouth technique, or a

bag-valve-mask BVM. The mouth-to-mouth technique is no longer recommended, unless a face shield is present. Verify that the chest rises and falls; if it does not, reposition it. If ventilation is still unsuccessful, and the victim is unconscious, it is possible that they have a foreign body in their airway. Begin chest compressions, stopping every 30 compressions, re-checking the airway for obstructions, removing any found, and re-attempting ventilation. If the ventilations are successful, assess for the presence of a pulse at the carotid artery. If a pulse is detected, then the patient should continue to receive artificial ventilations at an appropriate rate and transported immediately. Otherwise, begin CPR at a ratio of 30 compressions to 2 breaths. Laypersons are commonly instructed not to perform re-assessment, but this step is always performed by healthcare professionals HCPs. If defibrillation is performed, begin chest compression immediately after shock. BLS protocols continue until 1 the patient regains a pulse, 2 the rescuer is relieved by another rescuer of equivalent or higher training see patient abandonment, 3 the rescuer is too physically tired to continue CPR, or 4 the patient is pronounced dead by a medical doctor or other approved healthcare provider.

Drowning[edit] Rescuers should provide CPR as soon as an unresponsive victim is removed from the water. In particular, rescue breathing is important in this situation. A lone rescuer is typically advised to give CPR for a short time before leaving the victim to call emergency medical services. Since the primary cause of cardiac arrest and death in drowning and choking victims is hypoxia, it is more important to provide rescue breathing as quickly as possible in these situations, whereas for victims of VF cardiac arrest chest compressions and defibrillation are more important.

Hypothermia[edit] In unresponsive victims with hypothermia, the breathing and pulse should be checked for 30 to 45 seconds as both breathing and heart rate can be very slow in this condition. If cardiac arrest is confirmed, CPR should be started immediately. Wet clothes should be removed, and the victim should be insulated from wind. CPR should be continued until the victim is assessed by advanced care providers.

Choking[edit] Choking can occur from foreign body airway obstruction. Rescuers should intervene in victims who show signs of severe airway obstruction, such as a silent cough, cyanosis, or inability to speak or breathe. If a victim is coughing forcefully, rescuers should not interfere with this process. If a victim shows signs of severe airway obstruction, abdominal thrusts should be applied in rapid sequence until the obstruction is relieved. If this is not effective, chest thrusts can also be used. Chest thrusts can also be used in obese victims or victims in late pregnancy. Abdominal thrusts should not be used in infants under 1 year of age due to risk of causing injury. If a victim becomes unresponsive he should be lowered to the ground, and the rescuer should call emergency medical services and initiate CPR. When the airway is opened during CPR, the rescuer should look into the mouth for an object causing obstruction, and remove it if it is evident.

United Kingdom[edit] This article needs to be updated. Please update this section to reflect recent events or newly available information. Look, listen and feel for normal breathing for no more than 10 seconds. If the victim is breathing normally, turn him into the recovery position and get help. Continue to check for breathing. If the victim is not breathing normally, call for an ambulance. These guidelines differ from previous versions in a number of ways: They allow the rescuer to diagnose cardiac arrest if the victim is unresponsive and not breathing normally. Rescuers are taught to give chest compressions in the center of the chest, rather than measuring from the lower border of the sternum. Rescue breaths should be given over 1 second rather than 2 seconds. For an adult victim, the initial 2 rescue breaths should be omitted, so that 30 chest compressions are given immediately after a cardiac arrest has been diagnosed. These changes were introduced to simplify the algorithm, to allow for faster decision making and to maximize the time spent giving chest compressions; this is because interruptions in chest compressions have been shown to reduce the chance of survival. If the victim is able to speak and cough effectively, the obstruction is mild. If the victim is unable to speak or cough effectively, or is unable to breathe or is breathing with a wheezy sound, the airway obstruction is severe. If the victim has signs of mild airway obstruction, encourage him to continue coughing; do nothing else. If the victim has signs of severe airway obstruction, and is conscious, give up to 5 back blows sharp blows between the shoulder blades with the victim leaning well forwards. Check to see if the obstruction has cleared after each blow. If 5 back blows fail to relieve the obstruction, give up to 5 abdominal thrusts, again checking if each attempt has relieved the obstruction. If the obstruction is still present, and the victim still conscious, continue alternating 5 back blows and 5 abdominal thrusts. If the victim becomes unconscious, lower him to

the ground, call an ambulance, and begin CPR. The New England Journal of Medicine.

Chapter 2 : Free CPR, BLS, ACLS, PALS, First Aid Study Guide & Practice Tests

Adult Basic Life Support Algorithm for Healthcare Providers In the algorithm for adult basic life support, emphasis is placed upon immediate recognition of cardiac arrest and the implementation of efficient compressions and early defibrillation.

Chapter 3 : Basic life support - Wikipedia

Basic Life Support for Healthcare Providers Handbook iii The care steps outlined within this handbook are consistent with the International Liaison Committee on Resuscitation (ILCOR) Consensus on Science and Treatment Recommendations.