

Quotes from the New Resuscitation Guidelines issued on 28th November 2005

By the International Liaison Committee on Resuscitation (ILCOR), and interpreted by the American Heart Association (AHA), the European Resuscitation Council (ERC) and the resuscitation Council UK (RCUK)

Overview of CPR

(Circulation. 2005;112:IV-12-IV-17.)

“Sadly we have also learned that bystander CPR is performed in about only a third of witnessed arrests or fewer and that when CPR is performed, even by Professionals, it is often not done well. Excessive ventilation is provided during CPR for victims with advanced airways, with a resulting decrease in cardiac output; compressions are interrupted too frequently, with a resulting drop in coronary perfusion pressure and worse outcomes; and chest compressions are often too slow and too shallow.”

“These guidelines have addressed issues of CPR quality by stressing good CPR—“push hard, push fast, allow full chest recoil after each compression, and minimize interruptions in chest compressions,”

Adult Basic Life Support

(Circulation. 2005;112:IV-18-IV-34.)

Chest Compressions

- 1. “Effective” chest compressions are essential for providing blood flow during CPR.*
- 2. To give “effective” chest compressions, “push hard and push fast.” Compress the adult chest at a rate of about 100 compressions per minute, with a compression depth of 1½ to 2 inches (approximately 4 to 5 cm). Allow the chest to recoil completely after each compression, and allow approximately equal compression and relaxation times.”*

“In studies of chest compression in out-of hospital and in-hospital settings, 40% of chest compressions were of insufficient depth.”

“Rescuer fatigue may lead to inadequate compression rates or depth. Significant fatigue and shallow compressions are seen after 1 minute of CPR, although rescuers may deny that fatigue is present for >5 minutes.”

Compression-Ventilation Ratio

“rescuers may find a compression:ventilation ratio of 30:2 more tiring than a ratio of 15:2”

CPR Prompts

“Evidence from 2 adult studies, show that the chest compression rate during unprompted CPR is frequently inadequate in both out-of-hospital and in-hospital settings. Human, animal, and manikin studies showed consistent improvement in end-tidal CO₂ and/or quality of CPR in both the out-of-hospital and in-hospital settings when CPR prompt devices were used. A CPR prompt device may be useful in both out-of-hospital and in-hospital settings.”

Summary: The Quality of BLS

“Methods should be developed to improve the quality of CPR delivered at the scene of cardiac arrest by healthcare providers and lay rescuers. These may include education, training, assistance or feedback from biomedical devices, mechanical CPR, and electronic monitoring. Components of CPR known to affect hemodynamics include ventilation rate and duration, compression depth, compression rate and number, complete chest recoil, and hands-off time.”

Nb. These are only a few quotes from the new guidelines and readers should read the full text

available from ILCOR/AHA/ERC/RC(UK)