



Introduction

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The simultaneous publication of Guidelines 2000 for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care in both Resuscitation¹ and Circulation² provided the basis for the first international resuscitation guidelines, and represented a milestone in international collaboration to improve the practice and teaching of resuscitation medicine. Representatives from the world's major resuscitation organisations reached this consensus only after exhaustive review of the published literature and extensive debate at consensus meetings. The review process was thorough and provided the best evidence-based approach to the resuscitation of patients of all ages. The guidelines that arose from this process were adopted internationally with only minor modifications required by local custom, practice, or availability of drugs.

This review process was repeated during 2004/5. It was led by the International Liaison Committee on Resuscitation (ILCOR) and culminated in the 2005 International Consensus Conference on Emergency Cardiovascular Care (ECC) and Cardiopulmonary Resuscitation (CPR) Science with Treatment Recommendations, hosted by the American Heart Association (AHA). The summary science statements and treatment recommendations from this conference have been published: *2005 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science with Treatment Recommendations (CoSTR)*.³ This document formed the scientific basis for the European Resuscitation Council (ERC) Guidelines for Resuscitation 2005.⁴ The Resuscitation Council (UK) Guidelines 2005 in this document are an abbreviated version of the ERC guidelines and differ from other international organisations only in minor ways.

These latest guidelines contain some treatment recommendations and changes in practice based on new scientific evidence that has accrued since 2000. Consistency in practice among countries provides the basis for the large trials necessary to establish best practice, and the further development of such international collaboration is greatly to be encouraged. Similarly, consistent collection and reporting of audit data in registries that enable comparison between systems does much to improve practice and ensure that the victims of sudden cardiac arrest are given the best chance of successful resuscitation. These current guidelines reflect improvements in practice resulting from research and audit, encouraged by the co-operation that exists within the international resuscitation community.

The adult basic and advanced algorithms and paediatric resuscitation algorithms have been updated to reflect changes in the guidelines. Every effort has been made to keep these algorithms simple, yet make them applicable to cardiac arrest victims in most circumstances. Rescuers begin CPR if the victim is unconscious or unresponsive and not breathing normally (ignoring occasional gasps). A single compression-ventilation (CV) ratio of 30:2 is used by the single rescuer of an adult or child (excluding neonate) out of hospital, and for all adult CPR. This single ratio is designed to simplify teaching, promote skill retention, increase the number of compressions given, and decrease interruption to compressions. Once a defibrillator is attached, if a shockable rhythm is confirmed, a single shock is delivered. Irrespective of the resultant rhythm, chest compressions and ventilations (two minutes with a CV ratio of 30:2) are resumed immediately after the shock to minimise the 'no-flow' time.

Recent evidence indicates that unnecessary interruptions to chest compressions occur frequently both in and out of hospital.⁵⁻⁷ Resuscitation instructors must emphasise the importance of minimising interruptions to chest compression.

Several of the treatment recommendations in these guidelines represent significant changes in the way resuscitation is delivered. It will take time for courses and training materials to be updated and for this change in practice to be disseminated to healthcare professionals and laypeople by resuscitation trainers. As this transition is made there will inevitably be some variation in practice between individuals and healthcare organisations. The updated guidelines in Guidelines 2005 do not define the only way that resuscitation should be achieved, they merely represent a widely accepted view of how resuscitation can be undertaken both safely and effectively. The publication of new treatment recommendations does not imply that current clinical care is either unsafe or ineffective.

The process leading to the publication of the guidelines has entailed considerable work by many individuals over a protracted period. The Resuscitation Council (UK) would like to thank all the individuals and organisations that have contributed to the process and made this publication possible.

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