

## **The 2005 American Heart Association Guidelines for CPR and ECC**

### **Background**

The 2005 American Heart Association Guidelines for Cardiopulmonary Resuscitation (CPR) and Emergency Cardiovascular Care (ECC) are science-based recommendations for treating cardiovascular emergencies, particularly sudden cardiac arrest. They contain step-by-step instructions for resuscitating adults, children, infants and newborns.

The guidelines provide the most up-to-date, science-based treatment recommendations for emergency medical service (EMS) systems, emergency healthcare providers and training organizations. The American Heart Association incorporates its new guidelines into resuscitation training that it develops for all levels of responders—from lay rescuers to professional emergency healthcare providers.

### **International Consensus**

The guidelines are based on the Consensus on Science and Treatment Recommendations (CoSTR), a document developed by the International Liaison Committee on Resuscitation. This group includes the American Heart Association and leading international resuscitation councils. The review of resuscitation literature reflected in CoSTR is the largest ever published. It took more than 36 months and includes input from 380 international experts. CoSTR serves as the scientific basis for many countries' resuscitation treatment guidelines.

### **History**

Modern CPR and ECC methods were first introduced in the 1950s and 60s to save the lives of people who had stopped breathing and whose heart had stopped. First described in 1956, the ability of defibrillators to convert otherwise lethal heart arrhythmias was a dramatic medical achievement.

Mouth-to-mouth breathing was shown to be effective in 1958 after researchers learned that throughout history, midwives used the technique to save the lives of newly born infants. In 1960, external chest compressions were found to be effective for circulating blood when a victim's heart had stopped.

CPR training has been recommended for healthcare professionals and for the lay public for more than 35 years. The American Heart Association established guidelines for resuscitation in 1974 and has continued to revise CPR and ECC guidelines based on the latest science. Updates to the American Heart Association guidelines were published in 1980, 1986, 1992 and 2000 and have been used as the basis of other major organizations' resuscitation training.