



Resuscitation Council (UK) comments on compression-only CPR study published in The Lancet 17 March 2007

The authors of an observational study undertaken in Japan have concluded that compression-only cardiopulmonary resuscitation (CPR) by bystanders is preferable to conventional CPR (chest compressions combined with mouth-to-mouth ventilation) for out-of-hospital cardiac arrest. Of those treated initially with chest compressions only, 6% made a good recovery – this compared with 4% in those treated initially with conventional CPR. Survival rates for those given no CPR by bystanders were significantly worse than both the other groups at just 2.2%.

Some previous studies of out-of-hospital cardiac arrest have reported similar survival rates when comparing compression-only CPR with conventional CPR. This information was considered carefully during preparation of the existing resuscitation guidelines in 2005 by CPR experts from all over the world.

Although compression-only CPR may be adequate or even preferable for the first few minutes after cardiac arrest that is caused by heart disease, mouth-to-mouth ventilation will be required after cardiac arrest of longer duration or if caused by lung disease, drowning or trauma, or in children. In the Japanese study, the duration of CPR before arrival of the paramedics was short compared with average times in the UK. This study was undertaken in 2002-3. The 2005 resuscitation guidelines introduced several changes, including the provision of more chest compressions. We do not know if the results of this study would have been different if laypeople had given conventional CPR using the 2005 guidelines.

The existing [Resuscitation Council \(UK\) guidelines](#) indicate that chest compression-only CPR should be used after out-of-hospital cardiac arrest if the rescuer is untrained or unwilling to give mouth-to-mouth ventilation. The guidelines also indicate that interruptions to chest compressions should be minimised. For the time being, we do not plan to change our guidelines until the planned international review of resuscitation science in 2010. Individuals who have been trained in full conventional CPR should, ideally, continue with this technique. However, if unwilling to give mouth-to-mouth ventilation, they should give chest compression-only CPR. The Japanese study showed clearly that **any** CPR is better than no CPR.

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