



Feidhmeannacht na Seirbhíse Sláinte  
Health Service Executive



<b>CLINICAL DIRECTIVE 06/2011</b>
<b>FROM: Medical Director</b>
<b>TO: Emergency Medical Technicians, Paramedics, Advanced Paramedics, Emergency Medical Controllers</b>
<p><b>SUBJECT: Optimisation of CPR</b></p> <p>When dealing with cardiac arrest, all efforts to increase CPR quality and minimise pauses in CPR should be made. This should include the following:</p> <ul style="list-style-type: none"> <li>• Make every effort to ensure that 999 callers administer CPR as per AMPDS pre-arrival instructions;</li> <li>• Rotate rescuers providing chest compressions (where possible) every two minutes;</li> <li>• Continue chest compressions while the defibrillator is charging <ul style="list-style-type: none"> <li>○ In AED mode, resume CPR after analysis is completed and while the defibrillator is charging; stop CPR while the shock is being delivered and immediately resume CPR once the shock has been delivered. If the AED has a preshock CPR algorithm, follow the AED prompts.</li> <li>○ In manual mode, on recognition of VF resume CPR while charging, stop CPR while the shock is being delivered, and immediately resume CPR once the shock has been delivered</li> </ul> </li> <li>• Minimise interruptions in CPR while transferring the patient from the scene to the vehicle and the vehicle to the Emergency Department;</li> <li>• If available, use mechanical CPR devices early and throughout the arrest</li> <li>• Chest compressions in a moving vehicle have been shown to be less effective-particular attention should be given to CPR while in transit; (ensure personal safety at all times)</li> <li>• Advanced Paramedics should always manually defibrillate ventricular fibrillation (ref Clinical Directive 04-2011).</li> </ul>
<p><b>RATIONALE:</b></p> <p>The ILCOR 2010 guidelines have re-emphasised the importance of minimising hands off time during CPR. Studies have demonstrated that after a five second interruption in CPR it can take up to 90 seconds to get blood pressure up to a level that perfuses the brain. Poor quality CPR and pauses in CPR are directly related to poor neurological outcome or death</p>
<b>EFFECTIVE FROM:</b> July 6 <sup>th</sup> 2011
<b>EFFECTIVE TO:</b> Indefinite
<p><b>QUESTIONS OR COMMENTS ON THIS DIRECTIVE:</b></p> <p>Education and Competency Assurance Officer</p>

Clinical Directives are formulated by the National Ambulance Service Medical Directorate, the National Ambulance Service Education and Competency Assurance Team, the Dublin Fire Brigade Medical Director, the Dublin Fire Brigade EMS Support Team and the Irish Coast Guard Chief Crewman (Standards). Clinical Directives apply to all relevant staff in the HSE National Ambulance Service, Dublin Fire Brigade and Irish Coast Guard helicopter winch-crew.

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