

PEORIA AREA EMS SYSTEM
PREHOSPITAL CARE MANUAL

High Performance CPR

The 2014 upgrade to High-Performance CPR is an initiative to decrease time to patient care in Out-of-Hospital Cardiac Arrest (OHCA), maximize the amount of “hands on” compression time during a cardiac arrest and streamline the approach the OHCA through a simplified, efficient and choreographed team approach. It has been documented that efficient response times, maximizing compression time and minimizing interruptions in CPR lead to demonstrable better outcomes to cardiac arrest.

BLS/CPR

<p>BLS OWNS CPR (Even if ALS on scene first, BLS measures initiated first until backup arrives).</p>	<ul style="list-style-type: none"> • 1 provider initiates compressions • 1 provider attaches AED/Monitor first, then moves to airway <ul style="list-style-type: none"> - Do not stop compressions to cut clothes or to apply defibrillation pads • 1 provider acts as time keeper/team manager. <ul style="list-style-type: none"> - Calls out rotational changes every 2 minutes <ul style="list-style-type: none"> › Analyzes rhythm while providers change position until ALS arrives - Reminds ALS providers when last medication dose administered every 3-5 minutes.
<p>CONTINUOUS COMPRESSIONS</p>	<ul style="list-style-type: none"> • Compressions continue to be at a rate of 100-110 per minute for 2 minutes. • Use a metronome if possible (smart phone app or equipped with AED) • There will be no ventilation pauses. • “Do NOT interrupt chest compressions” during the 2 minute cycle. • If possible, change the Compression Person each 2 minute cycle.
<p>EFFECTIVE COMPRESSIONS</p>	<ul style="list-style-type: none"> • Aggressively maintain compression depth of 1 ½ - 2 inches (or more on larger individuals). • Compressions should be smooth with 50% down / 50% up motion. • Completely release pressure with each compression for maximum blood flow. • Do not bounce off chest, or lean on the chest during compressions
<p>AED/MONITOR</p>	<ul style="list-style-type: none"> • Turn on the AED/monitor as soon as cardiac arrest has been verified • Clearly state: “beginning 2 minutes of CPR” for time keeper/team leader • Team leader records times of initiation of compression and monitor placement • Do NOT interrupt chest compressions to cut clothes or place patches.
<p>INTERPOSED VENTILATIONS</p>	<ul style="list-style-type: none"> • Do NOT interrupt chest compressions; interpose (insert) (1) ventilation for every 10 compressions. <ul style="list-style-type: none"> - Ventilate ‘just enough for chest rise’. • You must count compressions to help appropriately time ventilations <ul style="list-style-type: none"> - The Designated Compression Provider should count compressions aloud in sets of ‘10’ to cue the ventilation provider to ventilate the patient • This will yield a ventilation rate of approximately 10 per minute. • The Compression Ventilation Ratio of 10:1 applies to pediatric patients as well.
<p>PULSE CHECKS</p>	<ul style="list-style-type: none"> • NO PULSE CHECKS AFTER SHOCK • Pulse checks only if organized rhythm after defibrillation • Continue to monitor the effectiveness of Chest Compressions during CPR • Wave-form capnography can greatly reduce need for pulse checks and can accurately identify ROSC
<p>CARDIAC ARREST AFTER EMS ARRIVAL (EMS WITNESSED ARREST)</p>	<ul style="list-style-type: none"> • The main priority is to defibrillate as soon as possible. • Continuous compressions while applying the monitor/AED. This will maximize the likelihood of success. • Once the monitor/AED is in place push Analyze. • Continue as in un-witnessed arrest.

ALS/ACLS

<p>INITIATE ALS after BLS initiated</p>	<ul style="list-style-type: none"> • Continue 2 minute CPR Cycles and 10:1 compression: ventilation ratio. • DO NOT stop compressions during Intubation attempts, other airway maneuvers or other procedures. • Verbalize out loud medication administrations for team leader/timekeeper • Peripheral IV preferred over IO (<i>Humeral Head IO preferred over tibial IO</i>) • Transport decisions are ultimately the responsibility of the treating/transporting paramedic(s). <ul style="list-style-type: none"> - During manual CPR, if possible, patient should not be moved/transported except if ROSC obtained - Transport suggested if: <ul style="list-style-type: none"> • Unsafe or hostile scene • Public setting (department store, convention, sporting event, etc.) • Outdoor setting and inclement weather - If LUCAS device is applied and operating effectively, patient may be transported or moved. • ALL PEDIATRIC CARDIAC ARRESTS ARE TO BE TREATED AS “LOAD AND GO” AND TRANSPORTED IMMEDIATELY
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