


### 3. Maternal Cardiac Arrest Algorithm

This clinical pathway is intended to supplement, rather than substitute for, professional judgment and may be changed depending upon a patient's individual needs. Failure to comply with this pathway does not represent a breach of the standard of care.

**FIRST RESPONDER**

- **Activate Resuscitation Team** (if not already present) **AND OBGYN**
- Document time of onset of maternal cardiac arrest
- Place the patient supine and **perform a left uterine displacement (LUD)** with as below.



- Start resuscitation as per the **1. Adult Cardiac Arrest Algorithm**; place hands slightly higher on the sternum than usual

**SUBSEQUENT RESPONDERS**

Maternal Interventions	Obstetric Interventions for Patient with an Obviously Gravid Uterus*
<p><b>Treat as per 1. Adult Cardiac Arrest Algorithm</b></p> <ul style="list-style-type: none"> <li>• Do not delay defibrillation</li> <li>• Give typical ACLS drugs and doses</li> <li>• Ventilate with 100% oxygen</li> <li>• Monitor wave form capnography and CPR quality</li> <li>• Provide post-cardiac arrest care as appropriate. See <b>2. Post-Cardiac Arrest Care Algorithm</b></li> </ul> <p><b>Maternal Modifications</b></p> <ul style="list-style-type: none"> <li>• Start IV access above the diaphragm</li> <li>• Assess for hypovolaemia and give fluid bolus when required</li> <li>• Anticipate difficult airway; experienced provider preferred for advanced airway placement</li> <li>• If patient receiving IV/IO magnesium prearrest, stop magnesium and give IV/IO calcium chloride 10mL in 10% solution, or calcium gluconate 30 mL in 10% solution</li> <li>• Continue all maternal resuscitative interventions (CPR, positioning, defibrillation, drugs, and fluids) during and after caesarean section</li> </ul>	<p><b>Obstetric Interventions for Patient with an Obviously Gravid Uterus*</b></p> <ul style="list-style-type: none"> <li>• Perform manual uterine displacement (LUD) – displace uterus to the patient's left to relieve aortocaval compression</li> <li>• Remove both internal and external foetal monitors if present</li> </ul> <p><b>Obstetric and neonatal teams should immediately prepare for possible emergency caesarean section</b></p> <ul style="list-style-type: none"> <li>• If no ROSC by <b>4 minutes</b> of resuscitative efforts, consider performing immediate emergency caesarean section</li> <li>• Aim for delivery within <b>5 minutes</b> of onset of resuscitative efforts</li> </ul> <p><small>*An obviously gravid uterus is a uterus that is deemed clinically to be sufficiently large to cause aortocaval compression</small></p>

#### Search for and Treat Possible Contributing Factors (BEAU-CHOPS)

Bleeding/DIC  
 Embolism: coronary/pulmonary/amniotic fluid embolism  
 Anaesthetic complications  
 Uterine atony  
 Cardiac disease (MI/ischaemia/aortic dissection/cardiomyopathy)  
 Hypertension/preeclampsia/eclampsia  
 Other: differential diagnosis of standard ACLS guidelines  
 Placenta abruption/previa  
 Sepsis