

Top Ten Things To Know Cardiac Arrest in Pregnancy

1. Data suggest that cardiac arrest in pregnancy occurs in 1:12,000 admissions for delivery. In addition, globally, 800 maternal deaths occur daily. Knowledge deficits and poor resuscitation skills may contribute to these deaths.
2. The number of high-risk women undergoing pregnancy is on the rise, as is the rate of severe complications related to pregnancy (including cardiac arrest). High-quality CPR is the primary component which contributes to survival from cardiac arrest in pregnancy.
3. The purpose of this scientific statement is to delineate and address all of the important factors related to maternal arrest and recommend the appropriate treatment and interventions.
4. Many high-quality CPR resuscitation parameters are the same for a pregnant patient compared to a non-pregnant patient. Compression rate, depth, positioning of the patient, hand placement, use of a firm backboard, minimal interruptions in chest compressions, and the use of the usual drugs and doses are the same.
5. Rapid defibrillation when indicated can be life saving. Defibrillation protocols are similar for the pregnant patient and non-pregnant patient. However, the staff on the obstetrical unit may not have the necessary experience in ECG rhythm recognition skills; therefore an automated external defibrillator may be used instead of a manual defibrillator.
6. For maternal cardiac arrest, there are additional considerations during resuscitation attempts. Left uterine displacement (LUD) is always necessary. Also, because of the physiological changes during pregnancy, hypoxemia develops more rapidly and should always be considered a cause of cardiac arrest. Rapid, high-quality, and effective airway and breathing interventions are critical. Airway management will likely be more difficult in the pregnant patient. Hospitals should develop clear protocols for airway management for maternal cardiac arrest. Importance and recommendations for preparing and performing timely perimortem cesarean delivery (PMCD) is emphasized
7. PMCD during resuscitation can be life saving and should not be delayed when appropriate. Delivery within even the first 5 minutes after arrest may be required. When performed, cesarean delivery should occur at the site of the arrest. Equipment for cesarean delivery should be readily available. Recommendations are given on neonatal resuscitation team and equipment, and the assessment of the newborn.
8. Hospitals should develop clear protocols to establish first responder roles and have the appropriate number of staff to respond to a pregnant patient in cardiac arrest. Hospitals should also have clear activation of the maternal cardiac arrest team with roles clearly defined. The cause of cardiac arrest, and immediate post arrest care and therapies should also be considered. For out of hospital cardiac arrest, EMS teams should have clear protocols established and used in co-ordination with receiving hospitals.
9. The development of central registry of cases of maternal cardiac arrest and near miss cardiac arrest cases would be valuable for future questions and protocols.
10. While this statement has provided recommendations, resources, point-of-care instruments, and algorithms, it is crucial that institutions use these resources and develop response plans for maternal resuscitation.

Jeejeebhoy FM, et al; on behalf of the American Heart Association Emergency Cardiovascular Care Committee, Council on Cardiopulmonary, Critical Care, Perioperative and Resuscitation, Council on Cardiovascular Diseases in the Young, and Council on Clinical Cardiology. [Cardiac arrest in pregnancy: a scientific statement from the American Heart Association](#) [published online ahead of print October 6, 2015]. *Circulation*. doi: 10.1161/CIR.0000000000000300.