Cardiac Arrest in Pregnancy Study (CAPS) Study 04/10
Data Collection Form - CASE

Please report any woman delivering on or after 1st July 2011 and before 1st July 2014.

Case Definition:
Please report any woman who has received immediate basic life support (BLS) (i.e. chest compressions and usually, ventilation breaths) at any time in pregnancy, up to the point of delivery of the baby.

Note that women requiring ventilatory support only, are NOT included.

Please return the completed form to:
UKOSS
National Perinatal Epidemiology Unit
University of Oxford
Old Road Campus
Oxford
OX3 7LF
Fax: 01865 617775
Phone: 01865 289714

Case reported in: ____________________________
Instructions

1. Please do not enter any personally identifiable information (e.g. name, address or hospital number) on this form.
2. Please record the ID number from the front of this form against the woman’s name on the Clinician’s Section of the blue card retained in the UKOSS folder.
3. Fill in the form using the information available in the woman’s case notes.
4. Tick the boxes as appropriate. If you require any additional space to answer a question please use the space provided in section 7.
5. Please complete all dates in the format DD/MM/YY, and all times using the 24hr clock e.g. 18:37
6. If codes or examples are required, some lists (not exhaustive) are included on the back page of the form.
7. If the woman has not yet delivered, please complete the form as far as you are able, excluding delivery and outcome information, and return to the UKOSS Administrator. We will send these sections again for you to complete two weeks after the woman’s expected date of delivery.
8. **If you do not know the answers to some questions, please indicate this in section 7.**
9. If you encounter any problems with completing the form please contact the UKOSS Administrator or use the space in section 7 to describe the problem.
Section 1: Woman’s details

1.1 Year of birth: 

1.2 Ethnic group:* (enter code, please see back cover for guidance) 

1.3 Marital status:  

1.4 Was the woman in paid employment at booking? 

   If Yes, what is her occupation: 

   If No, what is her partner’s (if any) occupation: 

1.5 Height at booking:  

1.6 Weight at booking:  

1.7 Smoking status:  

Section 2: Previous Obstetric History

2.1 Gravidity 

   Number of completed pregnancies beyond 24 weeks: 

   Number of pregnancies less than 24 weeks: 

   If No previous pregnancies, please go to section 3 

2.2 Did the woman have any previous pregnancy problems?* 

   If Yes, please specify: 

Section 3: Previous Medical History

3.1 Does the woman have a history of pre-disposing factors for heart disease?* 

   If Yes, please specify: 

3.2 Does the woman have a history of a previous cardiac arrest? 

   If Yes, please specify date: 

   And record cause if known: 

3.3 Does the woman have a history of recreational/illegal drug use? 

   If Yes, please specify drug/s used: 

   Record time and date of last known intake 

   OR Tick if not known 

3.4 Does the woman have any other previous or pre-existing medical problems?* 

   If Yes, please specify: 

*For guidance please see back cover
Section 4: This Pregnancy

Section 4a:

4a.1 Final Estimated Date of Delivery (EDD)

4a.2 Was this a multiple pregnancy?
   
   If Yes, please specify number of fetuses:

4a.3 Was pregnancy induced hypertension or pre-eclampsia diagnosed in this pregnancy?

4a.4 Were there any other problems in this pregnancy?
   
   If Yes, please specify:

4a.5 Was tocolytic therapy used at any point in this pregnancy?
   
   If Yes, please specify agent used and date first used:

<table>
<thead>
<tr>
<th>Agent</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

Section 4b: Cardiac Arrest in Pregnancy

4b.1 Where was the woman when she collapsed?

Was this outside hospital?
   
   If Yes, what time did the paramedic arrive?

4b.2 Was the arrest witnessed?

4b.3 Was the woman in established labour (>4cm dilated)?

4b.4 Were there any obvious pre-arrest events?

   If Yes, please specify:

4b.5 What was felt to be the most likely cause of the cardiac arrest?

Section 4c: Resuscitation

4c.1 Date and time cardiac arrest was diagnosed:

4c.2 Please give times of the following or tick if not done:

   Time Basic Life Support (cardiac compressions) started
   
   Time Advanced Life Support started (ECG monitor first applied)
   
   Time woman was intubated

4c.3 What type of defibrillator was used?

   If AED, was rhythm:

   If manual, was rhythm identified?
   
   If Yes, please specify the rhythm

4c.4 Were shocks given?

4c.5 Did the rhythm change during resuscitation?
**Section 5: Peri-arrest (peri-mortem) Caesarean Section**

Please record the events surrounding Peri-arrest (peri-mortem) Caesarean Section (PMCS) (delivery after 20 weeks’ gestation only)

5.1 **Was a peri-arrest (peri-mortem) caesarean section (PMCS) performed?**

   Yes  No  

   If No, please state why not, then go to section 6.

5.2 **Was the PMCS performed at the place of collapse?**

   Yes  No  

   If No, where was the PMCS performed? ___________________________  

   Why was the woman moved? ___________________________

5.3 **How was aortocaval compression reduced?**

   Not done  Tilt of pelvis  

   Manual displacement of uterus  Not documented  

5.4 **Who made the decision to perform PMCS?**

   Specialty ___________________________  

   Grade ___________________________

5.5 **What time was the decision to perform PMCS made?**

   ____________h ____________m  

   Was this more than 5 minutes after the arrest?  

   Yes  No  

   If Yes, why was there a delay? ___________________________

5.6 **Who performed the operation?**

   Specialty ___________________________  

   Grade ___________________________

5.7 **Was CPR continued throughout the PMCS?**

   Yes  No  

   If No, please state why not: ___________________________

5.8 **Were aseptic precautions taken?**

   Yes  No  

   If Yes, please specify: ___________________________

5.9 **Is there a scalpel on the arrest trolley for PMCS?**

   Yes  No  

*For guidance please see back cover*
5.10 What surgical incision was used to enter the abdomen? __________________________
5.11 What surgical incision was used to enter the uterus? __________________________

Section 6: Outcomes

Section 6a: Woman

6a.1 Was the woman’s cardiac output restored?
   Yes □ No □
   If Yes, what time was cardiac output restored?
   If No, what time was resuscitation abandoned?

6a.2 Was the woman admitted to ITU (level 3) care?
   Yes □ No □
   If Yes, please specify:
   Date of admission:
   Duration of stay:
   OR Tick if woman is still in ITU (level 3) care:
   OR Tick if woman was transferred to another hospital:

6a.3 Was the woman admitted to a coronary care unit?
   Yes □ No □
   If Yes, please specify:
   Date of admission:
   Duration of stay:
   OR Tick if woman is still in coronary care unit:
   OR Tick if woman was transferred to another hospital for coronary care:

6a.4 Did any other major maternal morbidity occur?*
   Yes □ No □
   If Yes, please specify: ____________________________________________

6a.5 Did the woman die?
   Yes □ No □
   If No, what was the total duration of hospital stay post arrest?
   If Yes, please specify date and time of death:
   What was the primary cause of death as stated on the death certificate?
   (Please state if not known.) ____________________________________________
   Was a post-mortem performed?
   Yes □ No □
   If Yes, please specify main findings: ______________________________________

Section 6b: Infant 1

NB: If more than one infant, for each additional infant, please photocopy the infant section of the form (before filling it in) and attach extra sheet(s) or download additional forms from the website: www.npeu.ox.ac.uk/ukoss

6b.1 Date and time of delivery:

6b.2 Mode of delivery:
   Spontaneous vaginal □ Ventouse □ Lift-out forceps □ Rotational forceps □
   Breech □ Pre-labour caesarean section □ Caesarean section after onset of labour □

*For guidance please see back cover
6b.3 Birthweight: __________________ g
6b.4 Sex of infant: Male ☐ Female ☐ Indeterminate ☐
6b.5 Was the infant stillborn? Yes ☐ No ☐
   If Yes, was fetus known to be dead before delivery? Yes ☐ No ☐
   If infant was stillborn, please go to section 7.
6b.6 5 min Apgar
6b.7 Were cord gases measured? Yes ☐ No ☐
   If Yes, please record cord gas results:

<table>
<thead>
<tr>
<th>Arterial</th>
<th>Venous</th>
</tr>
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<tbody>
<tr>
<td>pH</td>
<td></td>
</tr>
<tr>
<td>Base Excess</td>
<td>-</td>
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6b.8 Was the infant admitted to the neonatal unit? Yes ☐ No ☐
   If Yes, please give duration of stay: _______ days
6b.9 Did any other major infant complications occur?* Yes ☐ No ☐
   If Yes, please specify: _________________________________
6b.10 Did this infant die? Yes ☐ No ☐
   If Yes, please specify date and time of death _______ _______ _______ _______
   What was the primary cause of death as stated on the death certificate? _________________________________
(Please state if not known)

Section 7:
Please use this space to enter any other information you feel may be important
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Section 8:
8.1 Name of person completing the form: _________________________________
8.2 Designation: _________________________________
8.3 Today’s date: _______ _______ _______ _______ _______
You may find it useful in the case of queries to keep a copy of this form.

*For guidance please see back cover
Definitions

1. UK Census Coding for ethnic group
   WHITE
   01. British
   02. Irish
   03. Any other white background
   MIXED
   04. White and black Caribbean
   05. White and black African
   06. White and Asian
   07. Any other mixed background
   ASIAN OR ASIAN BRITISH
   08. Indian
   09. Pakistani
   10. Bangladeshi
   11. Any other Asian background
   BLACK OR BLACK BRITISH
   12. Caribbean
   13. African
   14. Any other black background
   CHINESE OR OTHER ETHNIC GROUP
   15. Chinese
   16. Any other ethnic group

2. Previous or current pregnancy problems, including:
   Thrombotic event
   Amniotic fluid embolism
   Eclampsia
   3 or more miscarriages
   Preterm birth or mid trimester loss
   Neonatal death
   Stillbirth
   Baby with a major congenital abnormality
   Small for gestational age (SGA) infant
   Large for gestational age (LGA) infant
   Infant requiring intensive care
   Puerperal psychosis
   Placenta praevia
   Gestational diabetes
   Significant placental abruption
   Post-partum haemorrhage requiring transfusion
   Surgical procedure in pregnancy
   Hyperemesis requiring admission
   Dehydration requiring admission
   Ovarian hyperstimulation syndrome
   Severe infection e.g. pyelonephritis

3. Other risk factors for heart disease:
   Essential hypertension
   Known ischaemic heart disease
   Congenital heart disease
   Previous cardiac surgery
   Previous myocardial infarction
   Cardiomyopathy
   Presence of Permanent Pacemaker
   Known reduction in ventricular function
   Low levels of HDL cholesterol
   High levels of LDL cholesterol
   Cocaine use
   Valvular heart disease
   Vasculitis
   Ischaemic heart disease in first degree relative
   Diabetes
   Bromocriptine/cabergoline use
   Family history of sudden cardiac death
   History of arrhythmia
   Personal or family history of hypertrophic obstructive cardiomyopathy (HOCM)
   Family history of inherited arrhythmia e.g. long QT syndrome
   Marfan syndrome
   Turner’s Syndrome

4. Previous or pre-existing maternal medical problems, including:
   Cardiac disease (congenital or acquired)
   Renal disease
   Endocrine disorders e.g. hypo or hyperthyroidism
   Psychiatric disorders
   Haematological disorders e.g. sickle cell disease, diagnosis thrombophilia
   Inflammatory disorders e.g. inflammatory bowel disease
   Autoimmune diseases
   Cancer
   HIV
   Respiratory disease e.g. severe asthma, COPD

5. Estimated date of delivery (EDD):
   Use the best estimate (ultrasound scan or date of last menstrual period) based on a 40 week gestation

6. Pre-arrest events (please consider 4Hs, 4Ts and subsequent detail), for example:
   Trauma, please specify e.g. RTA, domestic violence, self harm
   Major genital tract bleeding
   Tension pneumothorax
   Anaphylaxis
   Drug administration, please specify e.g. overdose, drug reaction
   Cardiac tamponade
   Eclampsia
   Status epilepticus
   Pulmonary Embolus
   Amniotic Embolus
   Neonatal encephalopathy
   Cerebrovascular accident
   Hypovolaemia e.g. Abruption
   Hypoxaemia of any cause e.g. acute severe asthma, infection/ARDS/failed airway management
   Metabolic e.g. hypo/hyperkalaemia, hypoglycaemia

7. Additional interventions at time of cardiac arrest
   (Treatment of Hs and Ts)
   Arterial Blood Gas (ABG)
   Active temperature control
   Pericardiocentesis
   Needle thoracocentesis
   Insertion of formal chest drain
   Pulmonary embolectomy performed

8. Aseptic precautions at PMCS
   Full surgical scrub
   Sterile gown
   Sterile gloves
   Skin preparation
   Sterile drapes
   Antibiotics

9. Major maternal medical complications, including:
   Persistent vegetative state
   Repeat cardiac arrest
   Cerebrovascular accident
   Adult respiratory distress syndrome
   Disseminated intravascular coagulopathy
   HELLP
   Pulmonary oedema
   Mendleson’s syndrome
   Renal failure
   Thrombotic event
   Septicaemia

10. Fetal / Infant complications, including:
    Respiratory distress syndrome
    Intraventricular haemorrhage
    Necrotising enterocolitis
    Neonatal encephalopathy
    Chronic lung disease
    Severe jaundice requiring phototherapy
    Major congenital anomaly
    Severe infection e.g. septicaemia, meningitis
    Exchange transfusion