

UK Obstetric Surveillance System

# 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

Royal College of Obstetricians and Gynaecologists 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.



Sec	ction 1: Woman's details	
1.1	Year of birth:	YYYY
1.2	Ethnic group:1* (enter code, please see back cover f	or guidance)
1.3	Marital status:	single married cohabiting
1.4	Was the woman in paid employment at booking?	Yes 🗌 No 🗌
	If Yes, what is her occupation:	
	If No, what is her partner's (if any) occupation:	
1.5	Height at booking:	cm
1.6	Weight at booking:	
1.7	Smoking status:	never gave up prior to pregnancy
		current gave up during pregnancy
Sec	ction 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 prob	blems?*         Yes         No
	If Yes, please specify:	
	If Yes, please specify:	

Sec	ction 3: Previous Medical History
3.1	Does the woman have a history of pre-disposing factors for heart disease? <sup>3*</sup> Yes No
	If Yes, please specify:
3.2	Does the woman have a history of a previous cardiac arrest?       Yes       No
	If Yes, please specify date:
3.3	Does the woman have a history of recreational/illegal drug use?       Yes       No
	If Yes, please specify drug/s used:
	Record time and date of last known intake   D D / M M / Y Y h h : m m     OR Tick if not known
3.4	Does the woman have any other previous or pre-existing medical problems? <sup>4*</sup> Yes No
	If Yes, please specify:

<b>S</b> 00	tion 4. This Programmy		
Section 4: This Pregnancy			
	tion 4a:		
	Final Estimated Date of Delivery (EDD)⁵*		
4a.2	Was this a multiple pregnancy?	Yes No	
	If Yes, please specify number of fetuses:		
4a.3	Was pregnancy induced hypertension or pre-eclampsia diagnosed in this pregnancy?	Yes No	
4a.4	Were there any other problems in this pregnancy?	Yes No	
	If Yes, please specify:		
4a.5	Was tocolytic therapy used at any point in this pregnancy?	Yes No	
	If Yes, please specify agent used and date first used :		
	Agent	Date	
		DD/MM/YY	
<b>S</b> 00	tion the Cordiac Arrest in Programory		
	tion 4b: Cardiac Arrest in Pregnancy Where was the woman when she collapsed?		
40.1	Was this outside hospital?	Yes No	
	If Yes, what time did the paramedic arrive?		
4b.2	Was the arrest witnessed?	Yes No	
4b.3	Was the woman in established labour (>4cm dilated)?	Yes No	
4b.4	Were there any obvious pre-arrest events? <sup>6*</sup> Yes	No Not known	
	If Yes, please specify:		
4b.5	What was felt to be the most likely cause of the cardiac arrest?		
Sec	tion 4c: Resuscitation		
4c.1	Date and time cardiac arrest was diagnosed:	M / Y Y h h : m m	
4c.2	Please give times of the following or tick if not done:		
	Time Basic Life Support (cardiac compressions) startedhTime Advanced Life Support started (ECG monitor first applied)hTime woman was intubatedh	Imm  Not done    Imm  Not done    Imm  Not done	
<b>4c.3</b>	What type of defibrillator was used?       AED       Ma	nual Not used	
	If AED, was rhythm: Shockable	Non-shockable	
	If manual, was rhythm identified?	Yes No	
	If Yes, please specify the rhythm	······	
	Were shocks given?	Yes No	
4c.5	Did the rhythm change during resuscitation?	Yes No	

<b>4c.6</b>	Where any additional interventions undertaken? <sup>7*</sup>	Yes	No
	If Yes, please specify:		
<b>4c.7</b>	Were any of the following medications administered?	Yes	No
	If Yes, please specify:		
	Epinephrine		
	Amiodarone		
	Atropine		
	Calcium		
	Sodium Bicarbonate		
	Potassium		
	Thrombolysis		
	Antiarrhythmics (e.g. beta blockers)		
	Intralipid		

# 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	on (PMCS) performed?	Yes No
	If No, please state why not, then go to to section 6.		
5.2	Was the PMCS performed at the place of collaps	ie?	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 dis	splacement 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 ma	ade?	h h : m m
	Was this more than 5 minutes after the arrest?		Yes No
	If Yes, why was there a delay?	·	
<b>5.6</b>	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? <sup>8*</sup>		Yes No
	If Yes, please specify:		
5.9	Is there a scalpel on the arrest trolley for PMCS?		Yes No

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:	DD/MM/YY
Duration of stay:	days
<b>OR</b> Tick if woman is still in ITU (level 3) care:	
<b>OR</b> 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:	days
OR Tick if woman is still in coronary care unit:	
OR Tick if woman was transferred to another hospital for coronary care	
$c_{2}$ ( Did any other major maternal markidity converge	
6a.4 Did any other major maternal morbidity occur?9*	Yes No
If Yes, please specify:	
	Yes No Yes No
If Yes, please specify:	
If Yes, please specify:6a.5 Did the woman die?	Yes No
If Yes, please specify:	Yes No
If Yes, please specify:	
If Yes, please specify:	Yes No
If Yes, please specify:6a.5 Did the woman die? 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? ( <i>Please state if not known.</i> ) Was a post-mortem performed? If Yes, please specify main findings:	
If Yes, please specify:	Yes No
If Yes, please specify:6a.5 Did the woman die? 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? ( <i>Please state if not known.</i> ) Was a post-mortem performed? If Yes, please specify main findings:	Yes No Yes No Section of the form
If Yes, please specify:	Yes No Yes No Section of the form
If Yes, please specify:	Yes No Yes No Section of the form
If Yes, please specify:6a.5 Did the woman die? 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? ( <i>Please state if not known.</i> ) Was a post-mortem performed? If Yes, please specify main findings: Section 6b: Infant 1 NB: If more than one infant, for each additional infant, please photocopy the in (before filling it in) and attach extra sheet(s) or download additional form www.npeu.ox.ac.uk/ukoss 6b.1 Date and time of delivery: 6b.2 Mode of delivery:	Yes No days A A A A A A A A A A A A A A A A A A A
If Yes, please specify:	Yes No   days   days   Yes No Yes No fant section of the form s from the website: Rotational forceps
If Yes, please specify:	Yes No days A Yes No Yes No  Yes No  fant section of the form s from the website:

6b.3 Birthweight:			g
6b.4 Sex of infant:		Male Female	Indeterminate
6b.5 Was the infant stillborn?			Yes No
<b>If Yes</b> , was fetus known to be dea If infant was stillborn, <i>please go to</i>	•		Yes No
6b.6 5 min Apgar			
6b.7 Were cord gases measured?			Yes 📃 No 🗌
If Yes, please record cord gas res	ults:		
		Arterial	Venous
	рН		
	Base Excess	-	-
6b.8 Was the infant admitted to the r	eonatal unit?		Yes No
If Yes, please give duration of sta	y:		days
6b.9 Did any other major infant com	plications occur? <sup>10*</sup>		Yes No
If Yes, please specify:			
6b.10 Did this infant die?			Yes 🗌 No 🗌
If Yes, please specify date and tin	ne of death		YY hh:mm
What was the primary cause of de (Please state if not known)	eath as stated on the	death certificate?	24hr

## 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.

## Definitions

## 1. UK Census Coding for ethnic group WHITE

- 01. British
- 02. Irish

03. Any other white background

- MIXED
  - 04. White and black Caribbean05. White and black African
  - 06. White and Asian
  - 07. Any other mixed background
- ASIAN OR ASIAN BRITISH
  - 08. Indian
  - 09. Pakistani
  - 19. Pakislarii 10. Danaladaah
  - 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, diagnosed 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
- Aortic dissection
- Hypovolaemia e.g. Abruption
- Cerebrovascular acident

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