Anaphylaxis in Pregnancy 03/12

Data Collection Form - CASE

Please report all pregnant women diagnosed with anaphylaxis on or after 01/10/2012 and before 01/10/2014

Case Definition:

Anaphylaxis is defined as a severe, life-threatening generalised or systemic hypersensitivity reaction. The following three criteria must be met for a diagnosis of anaphylaxis to be made:

1. A life-threatening airway problem and/or breathing problem and/or circulatory problem

2. Sudden onset and rapid progression of symptoms

3. Skin and/or mucosal changes

Women should not be reported if a diagnosis of anaphylaxis has been excluded by their senior attending obstetrician.

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 single □ married □ cohabiting □

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 cm

1.6 Weight at booking kg

1.7 Smoking status never □ gave up prior to pregnancy □
current □ gave up during pregnancy □

Section 2: Previous Obstetric History

2.1 Gravidity

Number of previous completed pregnancies beyond 24 weeks □
Number of previous pregnancies less than 24 weeks □

2.2 Did the woman have any previous pregnancy problems?** Yes □ No □

If Yes, please specify ____________________________________________

Section 3: Previous Medical History

3.1 Does the woman have a previous history of anaphylaxis? Yes □ No □

3.2 Does the woman have a previous history of atopy? Yes □ No □

If Yes, please tick all that apply

Eczema □ Asthma □ Hay fever □

3.3 Does the woman have a history of allergic reaction to any of the following? Yes □ No □

If Yes, please tick all that apply

Latex □ Food stuffs □ Animal fur or bird feathers □
Dust mites □ Insect stings □ Pollen/spores □ Other □

If Other, please specify ____________________________________________

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

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

<table>
<thead>
<tr>
<th>Day</th>
<th>Month</th>
<th>Year</th>
</tr>
</thead>
</table>

#### 4a.2 Was this pregnancy a multiple pregnancy?

- Yes
- No

If Yes, specify number of fetuses

#### 4a.3 Were there any other problems in this pregnancy?

- Yes
- No

If Yes, please specify

### Section 4b: Diagnosis and management of anaphylaxis

#### 4b.1 What was the date and time when symptoms were first experienced?

<table>
<thead>
<tr>
<th>Day</th>
<th>Month</th>
<th>Year</th>
</tr>
</thead>
</table>

#### 4b.2 What was the date and time anaphylaxis was diagnosed?

<table>
<thead>
<tr>
<th>Day</th>
<th>Month</th>
<th>Year</th>
</tr>
</thead>
</table>

#### 4b.3 Did the woman have a life threatening airway problem?

- Yes
- No

If Yes, please tick all that apply

- Laryngeal or pharyngeal oedema
- Hoarse voice
- Stridor
- Other

If Other, please specify

#### 4b.4 Did the woman have a life threatening breathing problem?

- Yes
- No

If Yes, please tick all that apply

- Shortness of breath and raised respiratory rate
- Wheeze
- Decreased oxygen saturations
- Confusion secondary to hypoxia
- Cyanosis
- Respiratory exhaustion or respiratory arrest
- Other

If Other, please specify

#### 4b.5 Did the woman have a life threatening circulatory problem?

- Yes
- No

If Yes, please tick all that apply

- Signs of shock such as faintness, pallor or clammy skin
- Tachycardia $>100$ bpm
- Systolic BP $<90$ mmHg
- Decreasing level of consciousness
- Signs of ischaemia on ECG
- Cardiac arrest

#### 4b.6 Did the woman have skin or mucosal changes (for example flushing, urticarial/nettle rash, angioedema)?

- Yes
- No

If Yes, please give details

#### 4b.7 Where was the woman when anaphylaxis occurred?

- Home or Community
- Postnatal ward
- Delivery suite
- Theatre
- Other

#### 4b.8 Was there a suspected causative agent?

- Yes
- No
- Unknown

If Yes, please state the suspected causative agent:

#### 4b.9 Did the woman have any known previous exposure to the causative agent?

- Yes
- No
- Unknown

If Yes, please state when

---

*For guidance please see back cover*
4b.10 Were any regular medications (including over the counter, herbal or recreational) being taken prior to the onset of anaphylaxis?  
   Yes [ ] No [ ]
   If Yes, please list these medications ____________________________

4b.11 Were vital observations recorded prior to anaphylaxis?  
   Yes [ ] No [ ]
   If Yes, what were the most recent set of vital observations prior to the diagnosis of anaphylaxis

<table>
<thead>
<tr>
<th>Observation</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood pressure (mmHg)</td>
<td>□ □ □</td>
<td>□ □ □ □ □ □</td>
</tr>
<tr>
<td>Oxygen saturation (%)</td>
<td>□ □ □</td>
<td>□ □ □ □ □ □</td>
</tr>
<tr>
<td>Heart rate (bpm)</td>
<td>□ □ □</td>
<td>□ □ □ □ □ □</td>
</tr>
<tr>
<td>Respiratory rate/min</td>
<td>□ □ □</td>
<td>□ □ □ □ □ □</td>
</tr>
</tbody>
</table>

4b.12 What were the vital observations at the time of diagnosis of anaphylaxis?  
   Yes [ ] No [ ]

<table>
<thead>
<tr>
<th>Observation</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
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<td>□ □ □</td>
<td>□ □ □ □ □ □</td>
</tr>
<tr>
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</tr>
<tr>
<td>Heart rate (bpm)</td>
<td>□ □ □</td>
<td>□ □ □ □ □ □</td>
</tr>
<tr>
<td>Respiratory rate/min</td>
<td>□ □ □</td>
<td>□ □ □ □ □ □</td>
</tr>
</tbody>
</table>

4b.13 Did the woman have a cardiorespiratory arrest?  
   Yes [ ] No [ ]
   If Yes, please state the date and time at which this occurred □ □ □ □ □ □ □ : □ □ : □ □

4b.14 Was any fetal heart rate abnormality noted?  
   Yes [ ] No [ ]
   If Yes,  
   What was the abnormal rhythm? ____________________________
   Date and time it was first noted □ □ □ □ □ □ □ : □ □ : □ □
   How long did it persist? ______ minutes

4b.15 Following diagnosis of anaphylaxis, was high flow oxygen given?  
   Yes [ ] No [ ]

4b.16 Following diagnosis of anaphylaxis, were IV fluids given?  
   Yes [ ] No [ ]
   If Yes, please state

<table>
<thead>
<tr>
<th>Name of fluid</th>
<th>Volume (ml)</th>
<th>Time started</th>
<th>Time stopped</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□ □ □ □ □ □</td>
<td>□ □ □ □ □ □</td>
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<td>□ □ □ □ □ □</td>
</tr>
</tbody>
</table>

4b.17 Following diagnosis of anaphylaxis, were any of the following drugs administered?  
   Yes [ ] No [ ]
   If Yes,

<table>
<thead>
<tr>
<th>Name of drug</th>
<th>Time given</th>
<th>Dose given</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adrenaline</td>
<td>Yes [ ] No [ ]</td>
<td>□ □ □ □ □ □</td>
<td>□ □ □ □ □ □</td>
</tr>
<tr>
<td>Chlorphenamine</td>
<td>Yes [ ] No [ ]</td>
<td>□ □ □ □ □ □</td>
<td>□ □ □ □ □ □</td>
</tr>
<tr>
<td>Hydrocortisone</td>
<td>Yes [ ] No [ ]</td>
<td>□ □ □ □ □ □</td>
<td>□ □ □ □ □ □</td>
</tr>
</tbody>
</table>

*For guidance please see back cover*
4b.18 Were any other drugs given during the resuscitation period?

If Yes, please state:

<table>
<thead>
<tr>
<th>Drug name</th>
<th>Time given</th>
<th>Dose given</th>
<th>Route</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4b.19 Once resuscitation was complete, was blood taken for serum tryptase levels?

If Yes, please state the result:

- Normal
- Raised

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**Section 5: Delivery**

5.1 Did this woman have a miscarriage?

If Yes, please specify date

5.2 Did this woman have a termination of pregnancy?

If Yes, please specify date

5.3 Is this woman still undelivered?

If Yes, will the woman receive the remainder of her antenatal care at your hospital?

If No, please indicate the name of the hospital providing future care

Will she be delivered at your hospital?

5.4 Was delivery induced?

If Yes, please state indication

5.5 Did the woman labour?

If Yes, what date and time was labour diagnosed?

Was syntocinon used?

Did the woman have an epidural for analgesia?

5b.1 Was delivery by caesarean section?

If Yes, please state:

- Grade of urgency
- Indication for caesarean section
- Method of anaesthesia:
  - Spinal
  - Epidural top-up
  - CSE
  - Epidural
  - General anaesthetic

The time between decision and delivery of the baby

*For guidance please see back cover*
Section 6: Outcomes

Section 6a: Woman

6a.1 Was the woman admitted to ITU (critical care level 3)?  
Yes ☐ No ☐
If Yes, please specify:
Duration of stay ☐ ☐ days
Or Tick if woman is still in ITU ☐
Or Tick if woman was transferred to another hospital ☐

6a.2 Did any other major maternal morbidity occur? ☐
Yes ☐ No ☐
If Yes, please specify ____________________________

6a.3 Did the woman die?  
Yes ☐ No ☐
If Yes, please specify date and time of death
DD/MM/YYYY HH:MM
What was the primary cause of death as stated on the death certificate? (Please state if not known) ____________________________

Section 6b: Infant

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
DD/MM/YYYY HH:MM

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

6b.3 Birthweight
☐ ☐ ☐ ☐ ☐ g

6b.4 Sex of infant  
Male ☐ Female ☐ Indeterminate ☐

6b.5 Was the infant stillborn?  
Yes ☐ No ☐
If Yes, was the death ante-partum or intra-partum?  
Ante-partum ☐ Intra-partum ☐

6b.6 Apgar
5 min ☐ 10 min ☐

6b.7 Did the infant require resuscitation at birth?  
Yes ☐ No ☐

6b.8 Were cord gases measured?  
Yes ☐ No ☐
If Yes, please record cord gas results:
<table>
<thead>
<tr>
<th>pH</th>
<th>Arterial</th>
<th>Venous</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- ☐ ☐ ☐</td>
<td>- ☐ ☐ ☐</td>
</tr>
<tr>
<td>Base Excess</td>
<td>- ☐ ☐ ☐</td>
<td>- ☐ ☐ ☐</td>
</tr>
</tbody>
</table>

6b.9 Did the infant experience any seizures?  
Yes ☐ No ☐ Unknown ☐

6b.10 Was an aEEG or a full EEG performed?  
Yes ☐ No ☐ Unknown ☐
If Yes, please state the results ____________________________

6b.11 Did the infant have any neurological imaging?  
Yes ☐ No ☐ Unknown ☐
If Yes, type of imaging used ____________________________
Date and time
DD/MM/YYYY HH:MM
What damage was identified? ____________________________

*For guidance please see back cover
<table>
<thead>
<tr>
<th>Section 6b.12</th>
<th>Did this infant have a neurological examination?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes ☐ No ☐ Unknown ☐</td>
</tr>
<tr>
<td></td>
<td>If Yes, was there any evidence of neurological deficit on neurological examination?</td>
</tr>
<tr>
<td></td>
<td>Yes ☐ No ☐</td>
</tr>
<tr>
<td></td>
<td>If Yes, please state what this was ___________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 6b.13</th>
<th>Was the infant admitted to the neonatal unit?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes ☐ No ☐</td>
</tr>
<tr>
<td></td>
<td>If Yes, please state the duration of stay ___ days</td>
</tr>
<tr>
<td></td>
<td>Or Tick if the infant is still in the neonatal unit</td>
</tr>
<tr>
<td></td>
<td>Or Tick if the infant was transferred to another hospital</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 6b.14</th>
<th>Was a diagnosis of neonatal encephalopathy made?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes ☐ No ☐ Unknown ☐</td>
</tr>
<tr>
<td></td>
<td>If Yes, was the baby cooled? Yes ☐ No ☐ Unknown ☐</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 6b.15</th>
<th>Did any other major infant complications occur?*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes ☐ No ☐</td>
</tr>
<tr>
<td></td>
<td>If Yes, please specify details ________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 6b.16</th>
<th>Did this infant die?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes ☐ No ☐</td>
</tr>
<tr>
<td></td>
<td>If Yes, please specify date of death <em><strong>/</strong>/</em>___</td>
</tr>
<tr>
<td></td>
<td>What was the primary cause of death as stated on the death certificate? (Please state if not known) ____________________________</td>
</tr>
</tbody>
</table>

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**Section 7:**

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

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**Section 8:**

Name of person completing the form ____________________________

Designation ____________________________

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. 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

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

5. RCA/RCOG/CEMACH/CNST Classification for urgency of caesarean section:
   1. Immediate threat to life of woman or fetus
   2. Maternal or fetal compromise which is not immediately life-threatening
   3. Needing early delivery but no maternal or fetal compromise
   4. At a time to suit the woman and maternity team

6. Major maternal morbidity, including:
   Persistent vegetative state
   Cardiac arrest
   Cerebrovascular accident
   Adult respiratory distress syndrome
   Disseminated intravascular coagulopathy
   HELLP
   Pulmonary oedema
   Mendleson’s syndrome
   Renal failure
   Thrombotic event
   Septicaemia
   Required ventilation

7. 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