

UK Obstetric Surveillance System

Severe Maternal Sepsis Study 03/11

Data Collection Form - CASE

Please report any woman delivering on or after 1st June 2011 and before 1st June 2013.

Case Definition:

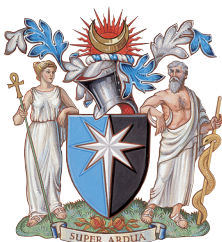
Any pregnant or recently pregnant woman (up to 6 weeks postpartum) diagnosed with severe sepsis (irrespective of the source of infection). **Report only cases diagnosed as having severe sepsis by a senior clinician.**

A severe sepsis case would be expected to include women in one of the following groups:

1. Death related to infection or suspected infection
2. Any women requiring level 2 or level 3 critical care (or obstetric HDU type care) due to severe sepsis or suspected severe sepsis
3. A clinical diagnosis of severe sepsis

As a guide, clinical diagnosis of severe sepsis would usually be associated with 2 or more of the following:

- a. Temperature $>38^{\circ}\text{C}$ or $<36^{\circ}\text{C}$ measured on 2 occasions at least 4 hours apart
- b. Heart rate >100 beats/ minute measured on 2 occasions at least 4 hours apart
- c. Respiratory rate >20 / minute measured on 2 occasions at least 4 hours apart
- d. White cell count $>17 \times 10^9/\text{L}$ or $<4 \times 10^9/\text{L}$ or with $>10\%$ immature band forms, measured on 2 occasions



Royal College of
Obstetricians and
Gynaecologists

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:^{1*}** (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?** 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:** . 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 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?^{2*}** Yes No
- If Yes, please specify: _____
- 2.3 Did the woman have any previous Caesarean sections?** Yes No
- If Yes, how many?

*For guidance please see back cover

Section 3: Previous Medical History

3.1 Does the woman have a history of recurrent infections? Yes No

If Yes, please specify: _____

3.2 Was the woman immuno-compromised (including taking immuno-suppressants)? Yes No

If Yes, please specify cause: _____

3.3 Does the woman have (or have a history of) diabetes? Yes No

3.4 Does the woman have a history of a sexually transmitted infection?^{3*} Yes No

If Yes, please give details: _____

3.5 Does the woman have any other previous or pre-existing medical problems?^{4*} Yes No

If Yes, please specify: _____

3.6 Does the woman or any household member have a recent history (two weeks prior to presentation) of any of the following?

	Woman		Household member		
	Yes	No	Yes	No	Not Known
Sore throat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Respiratory infection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diarrhoea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vomiting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flu-like illness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sustained abdominal pain	<input type="checkbox"/>	<input type="checkbox"/>			
Mastitis (>48 hrs duration)	<input type="checkbox"/>	<input type="checkbox"/>			

Section 4: This Pregnancy - Antenatal Information

4.1 Final Estimated Date of Delivery (EDD)^{5*} / /

4.2 Was this a multiple pregnancy? Yes No

If Yes, please specify number of fetuses:

4.3 Date of booking: / /

4.4 Did the woman have any invasive antenatal procedures, eg CVS, amniocentesis? Yes No

If Yes, please specify: _____

4.5 Was the woman prescribed antibiotics in the two weeks prior to her severe sepsis? Yes No

If Yes: What antibiotics were taken? _____

What was the indication? _____

4.6 Were there any other problems in this pregnancy?^{2*} Yes No

If Yes, please specify: _____

*For guidance please see back cover

Section 5: Delivery and Diagnosis of Sepsis

Section 5a: Delivery

5a.1 Did the woman have a miscarriage?

Yes No

If Yes, please specify date:

/ /

5a.2 Did the woman have a termination of pregnancy?

Yes No

If Yes, please specify date:

/ /

If Yes to 5a.1 or 5a.2, please now complete sections 5b, 6a, 7 and 8

5a.3 Is the woman still undelivered?

Yes No

If Yes, will she be receiving the rest of her antenatal care from your hospital?

Yes No

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

Will she be delivered at your hospital?

Yes No

If No, please indicate name of delivery hospital, then go to Section 7

5a.4 Was delivery induced?

Yes No

If Yes, please state indication: _____

Was vaginal prostaglandin used?

Yes No

5a.5 What was the date and time of membrane rupture?

/ / : :
24hr

5a.6 Did the woman labour?

Yes No

If Yes, what was the date and time labour was diagnosed?

/ / : :
24hr

How many vaginal examinations were documented?

Was fetal blood sampling performed?

Yes No

Was a fetal scalp electrode used?

Yes No

Were there any complications of vaginal delivery (e.g. episiotomy, 2nd, 3rd or 4th degree tear)?

Yes No Not applicable

If Yes, please specify: _____

Did the woman undergo a manual removal of placenta?

Yes No Not applicable

5a.7 Did the woman deliver at home?

Yes No

5a.8 Was delivery by caesarean section?

Yes No

If Yes, please state:

Grade of urgency:^{6*}

Indication for caesarean section: _____

Method of anaesthesia:

Regional General anaesthetic

Were prophylactic antibiotics given?

Yes No

If Yes, please give names of antibiotics given:

Were there any complications during the surgery?

Yes No

If Yes, please specify: _____

5a.9 Did the woman have any of the following prior to diagnosis of sepsis?

(please tick all that apply)

Intravenous lines ('venflons') Central venous lines
Intra-arterial lines In-out urinary catheter In-dwelling urinary catheter

5a.10 Did the woman have an epidural or a spinal for anaesthesia/analgesia?

Yes No

5a.11 Was the woman admitted/re-admitted after delivery?

Yes No

If Yes, what was date of admission/re-admission?

/ /

Please state the reason for admission/re-admission: _____

Section 5b: Diagnosis and Management of Sepsis

5b.1 What was the date and time of severe sepsis diagnosis?

/ / : :
24hr

5b.2 Where was the woman when sepsis was first suspected?

Hospital Home

5b.3 Did the woman have any of the following:

A temperature >38°C measured on 2 occasions at least 4 hours apart?

Yes No

If Yes: Date and time first recorded:

/ / : :
24hr

Date and time last recorded:

/ / : :
24hr

A temperature <36°C measured on 2 occasions at least 4 hours apart?

Yes No

If Yes: Date and time first recorded:

/ / : :
24hr

Date and time last recorded:

/ / : :
24hr

Heart rate >100 beats/ minute measured on 2 occasions at least 4 hours apart?

Yes No

If Yes: Date and time first recorded:

/ / : :
24hr

Date and time last recorded:

/ / : :
24hr

Respiratory rate >20/minute measured on 2 occasions at least 4 hours apart?

Yes No

If Yes: Date and time first recorded:

/ / : :
24hr

Date and time 2nd recorded:

/ / : :
24hr

White cell count >17 x10⁹/L, on two occasions?

Yes No

If Yes: Date and time first recorded:

/ / : :
24hr

Date and time 2nd recorded:

/ / : :
24hr

White cell count <4 x10⁹/L, on two occasions?

Yes No

If Yes: Date and time first recorded:

/ / : :
24hr

Date and time 2nd recorded:

/ / : :
24hr

White cell immature band forms > 10%, on two occasions?

Yes No Not done

If Yes: Date and time first recorded:

/ / : :
24hr

Date and time 2nd recorded:

/ / : :
24hr

5b.4 Was there laboratory confirmed infection?

Yes No

If Yes: What was the source of the sample (e.g. blood, urine, etc.)? _____

Date of first positive sample: / /

Organism identified: _____

5b.5 What was the primary source of the infection which caused the sepsis?

5b.6 Was septic shock diagnosed?

Yes No

If Yes, what was the date of diagnosis?

/ /

5b.7 Please record the following or tick if not measured

Lowest systolic BP mmHg **OR** Not measured

Highest lactate mmol/L **OR** Not measured

Greatest base deficit - . **OR** Not measured

Lowest pH . **OR** Not measured

5b.8 Were antibiotics administered for severe sepsis?

Yes No

If Yes, please list in table below (*Continue in section 7 if necessary*).

Antibiotic	Route	Date started	Date stopped
_____	_____	<input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/>
_____	_____	<input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/>
_____	_____	<input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/>

Section 6: Outcomes

Section 6a: Woman

6a.1 Was the woman admitted to HDU (including obstetric HDU) or level 2 care? Yes No

If Yes, duration of stay: days

OR Tick if woman is still in HDU or level 2 care:

OR Tick if woman was transferred to another hospital:

6a.2 Was the woman admitted to ITU or level 3 care? Yes No

If Yes, duration of stay: days

OR Tick if woman is still in ITU or level 3 care:

OR Tick if woman was transferred to another hospital:

6a.3 Did any other major maternal morbidity occur?* Yes No

If Yes, please specify: _____

6a.4 Has the woman been discharged from hospital after her episode of sepsis? Yes No

If Yes, what was the date of the woman's final discharge from hospital? / /

6a.5 Did the woman 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 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:

/ / : :
24hr

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, please go to section 7.

6b.6 5 min Apgar:

6b.7 Was the infant admitted to the neonatal unit?

Yes No

6b.8 Was the infant septic?

Yes No

6b.9 Did any other major infant complications occur?^{8*}

Yes No

If Yes, please specify: _____

6b.10 Did this infant die?

Yes No

If Yes, please specify date and time of death

/ / : :
24hr

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.

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
Rh(D) alloimmunisation

3. Previous history of sexually transmitted infection, including:

HIV
Syphilis
Gonorrhoea

Chlamydia
Genital herpes
Hepatitis C

4. Previous or pre-existing maternal medical problems, including:

Diabetes
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, anaemia
Inflammatory disorders e.g. inflammatory bowel disease
Autoimmune diseases
Cancer
Depression

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. 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

7. Major maternal medical complications, 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
Required ventilation

8. 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