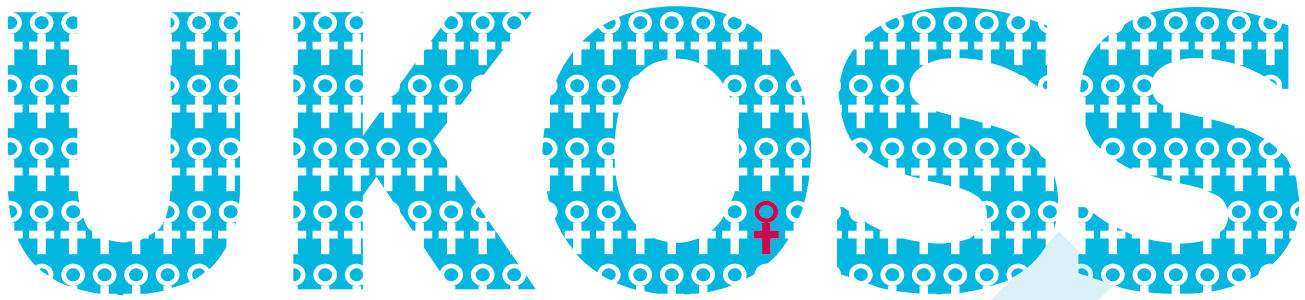


ID Number:



UK Obstetric Surveillance System

## Severe symptomatic peripartum hyponatraemia

### Study 03/19

#### Data Collection Form - CASE

Please report any woman delivering on or after the 01/04/19 and before 31/03/20

#### Case Definition:

All pregnant women identified as having:

Symptomatic hyponatraemia (Na < 125mmol/l) in labour or in the immediate 48 hours following delivery where other causes (e.g. sepsis, pre-eclampsia, drug overdose) have been clinically excluded.

Symptoms may include any of the following – disorientation, agitation, seizures, coma and focal neurological deficits.

#### Instructions

1. Please do not enter any personally identifiable information (e.g. name, address or hospital number) on this form.
2. Fill in the form using the information available in the woman's case notes.
3. If the woman has received secondary mental health care (prior to or during her current pregnancy) please consult with the woman's most recent psychiatric team to complete this form. If you are unable to contact a psychiatrist involved in the woman's care please contact the UKOSS administrator and provide details of the mental health team she was receiving care from.
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 you do not know the answers to some questions, please indicate this in section 7
8. 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.
9. If you do not know the answers to some questions, please indicate this in section 7.
10. If you encounter any problems with completing the form please contact the UKOSS coordinator or use the space in section 10 to describe the problem.



Royal College of  
Obstetricians  
and Gynaecologists

Bringing to life the best  
in women's health care

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: \_\_\_\_\_



**NPEU**

## Section 1: Woman's details

- 1.1 Year of birth:
- 1.2 Ethnic group:<sup>1\*</sup> (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 What is the woman's smoking status?  
Never  Current  Gave up prior to pregnancy  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 other previous pregnancy problems?<sup>2\*</sup> Yes  No   
If Yes, please specify: \_\_\_\_\_

## Section 3: Previous Medical History

- 3.1 Did the woman have any previous or pre-existing medical problems?<sup>3\*</sup> Yes  No   
If Yes, please give details: \_\_\_\_\_
- 3.2 Did the woman receive any medication in the 7 days preceding delivery? Yes  No   
If Yes, please list any medications received: \_\_\_\_\_
- 3.3 Did this woman have diabetes prior to pregnancy? Type 1  Type 2  No

## Section 4: This Pregnancy

- 4.1 Final Estimated Date of Delivery (EDD):<sup>4\*</sup>   /   /
- 4.2 Was this a multiple pregnancy? Yes  No   
If Yes, please specify number of fetuses:
- 4.3 Did this woman have pre-eclampsia? Yes  No
- 4.4 Were there any other problems in this pregnancy?<sup>2\*</sup> Yes  No   
If Yes, please specify: \_\_\_\_\_

## Section 5:

### Section 5a: Woman

**5a.1 Did this woman have a miscarriage?**

Yes  No

If Yes, please specify date

/   /

**5a.2 Did this 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 Was delivery induced?**

Yes  No

If Yes, please state indication: \_\_\_\_\_

Was vaginal prostaglandin used?

Yes  No

If Yes, please specify dose schedule and type of prostaglandin (*in table below*)

Agent	Dose	Date	Time
		<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"/> <small>24hr</small>
		<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"/> <small>24hr</small>
		<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"/> <small>24hr</small>

**5a.4 Did the woman labour?**

Yes  No

If Yes, please state date and time of diagnosis of labour?   /   /     :

**5a.5 Where was the woman managed in labour? (please tick all that apply)**

	Tick if Yes	Date and time of admission
Home	<input type="checkbox"/>	N/A
Freestanding midwifery unit	<input type="checkbox"/>	<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"/> <small>24hr</small>
Alongside midwifery unit	<input type="checkbox"/>	<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"/> <small>24hr</small>
Secondary care obstetric unit	<input type="checkbox"/>	<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"/> <small>24hr</small>
Tertiary care obstetric unit	<input type="checkbox"/>	<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"/> <small>24hr</small>
Other ( <i>please specify</i> ) _____	<input type="checkbox"/>	<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"/> <small>24hr</small>

**5a.6 Was the birthing pool used in labour?**

Yes  No

If Yes, how long was the woman in the pool in total? (*please tick one*)

<1hr  1-2hrs  2-4hrs  >4hrs

Did the birth occur in water?

Yes  No

**5a.7 Was delivery by caesarean section?**

Yes  No

If Yes, please state:

Grade of urgency:<sup>5\*</sup>

Indication for caesarean section: \_\_\_\_\_

Method of anaesthesia:

Regional  General anaesthetic

If **No**, was the vaginal delivery assisted?

Yes  No

If **Yes**, please state method used

Forceps  Ventouse

And method of analgesia / anaesthesia Epidural  Spinal  Local anaesthetic block

**5a.8 Were drugs used for 3rd stage?**

Yes  No

If **Yes**, please specify

Drug	Route	Time first given
_____	_____	h h : m m 24hr
_____	_____	h h : m m 24hr
_____	_____	h h : m m 24hr

**5a.9 Did the woman receive any oxytocin infusions either before or after delivery?**

Yes  No

If **Yes**, please specify volumes below

	Concentration/ dilution	Max ml/hr infusion rate	Start date and time	Stop date and time	Dilution fluid used
Up to delivery			DD / MM / YY h h : m m 24hr	DD / MM / YY h h : m m 24hr	
After delivery			DD / MM / YY h h : m m 24hr	DD / MM / YY h h : m m 24hr	

**5a.10 What was the woman's estimated total blood loss?**

ml

**Section 5b: Fluids received during labour and delivery**

**5b.1 Did this woman receive other intravenous fluids (not including oxytocin infusion) during labour and delivery, before the diagnosis of hyponatraemia?**

Yes  No

If **Yes**, please state type and volume administered before hyponatraemia was diagnosed

Type of intravenous fluid	Volume received (ml)
_____	_____
_____	_____
_____	_____

Was a detailed input/output fluid balance chart kept?

Yes  No

**5b.2 Did this woman have documented oral fluid intake?**

Yes  No

If **Yes**, please specify volume of oral fluid consumed during labour and delivery (mls)

Type of oral fluid	Documented prospectively	Estimated retrospectively
Water	_____	_____
Isotonic drinks – specify type _____	_____	_____
Other – specify type _____	_____	_____

## Section 5c: Hyponatraemia

**5c.1** What was the time and date when the hyponatraemia was diagnosed?

DD / MM / YY hh : mm  
24hr

**5c.2** What clinical features of hyponatraemia did the woman have?

(please tick all that apply and give date and time first noted)

Type of oral fluid	Tick if Yes	Date	Time
Headache	<input type="checkbox"/>	DD / MM / YY	hh : mm 24hr
Confusion/agitation	<input type="checkbox"/>	DD / MM / YY	hh : mm 24hr
Fitting	<input type="checkbox"/>	DD / MM / YY	hh : mm 24hr
Decreased conscious level	<input type="checkbox"/>	DD / MM / YY	hh : mm 24hr
Coma	<input type="checkbox"/>	DD / MM / YY	hh : mm 24hr
Other (please specify) _____	<input type="checkbox"/>	DD / MM / YY	hh : mm 24hr

**5c.3** What was the lowest serum sodium value recorded with date and time?

mmol/l DD / MM / YY hh : mm  
24hr

**5c.4** Did this woman have features of sepsis immediately prior to diagnosis? (please tick all that apply)

Initiation of antibiotics for presumed infection (exclude prophylactic doses)

Pyrexia  Positive cultures  Other  None

## Section 5d: Hyponatraemia

**5d.1** Please indicate which of the following managements were used: (please tick all that apply)

No treatment

Fluid Restriction

Diuretics – please specify name \_\_\_\_\_ dose \_\_\_\_\_

Hypertonic saline – please specify percentage \_\_\_\_\_ volume \_\_\_\_\_

Other – please specify \_\_\_\_\_

**5d.2** Please indicate the speed of correction of hyponatraemia by entering date and time of serum sodium results until Na  $\geq$ 130 mmol/l or 48h after diagnosis whichever comes first (either from laboratory sample or blood gas).

Date	Time	Serum sodium (mmol/l)
DD / MM / YY	hh : mm 24hr	_____
DD / MM / YY	hh : mm 24hr	_____
DD / MM / YY	hh : mm 24hr	_____

Please continue in Section 7 if necessary

## Section 6: Outcomes

### Section 6a: Woman

6a.1 Was the woman admitted to level 2 critical care (HTU)? Yes  No

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

If Yes, duration of stay:   days

OR Tick if woman is still in HTU/ITU:

OR Tick if woman was transferred to another hospital:

6a.3 Did the woman require ventilatory support? Yes  No

If Yes, how long for?   days   hours

6a.4 Was there any evidence of neurological sequelae (e.g. pontine demyelination, persistent vegetative state) from rapid correction of sodium? Yes  No

If Yes, please specify: \_\_\_\_\_

6a.5 Did any other major maternal morbidity occur?<sup>6\*</sup> Yes  No

If Yes, please specify: \_\_\_\_\_

6a.6 What was the woman's date of discharge?   /   /

OR Tick if woman still in hospital

6a.7 Did the woman 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 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](http://www.npeu.ox.ac.uk/ukoss)**

6b.1 Date and time of delivery:   /   /    :   24hr

6b.2 Mode of delivery: Spontaneous vaginal  Ventouse  Forceps  Vaginal 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 Were cord gases taken at delivery? Yes  No

If Yes, please state the following cord gas results:

Venous pH    BE    Na

Arterial pH    BE    Na



## 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 medical complications, including:

Persistent vegetative state  
Pontine demyelination  
Cardiac arrest  
Cerebrovascular accident  
Adult respiratory distress syndrome  
Disseminated intravascular coagulopathy  
HELLP  
Pulmonary oedema  
Mendleson's syndrome  
Renal failure  
Thrombotic event  
Septicaemia

### 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