



Royal College of  
Obstetricians  
and Gynaecologists

## NEWSLETTER 41 - April 2015

### Amniotic Fluid Embolism (AFE) - Latest Results

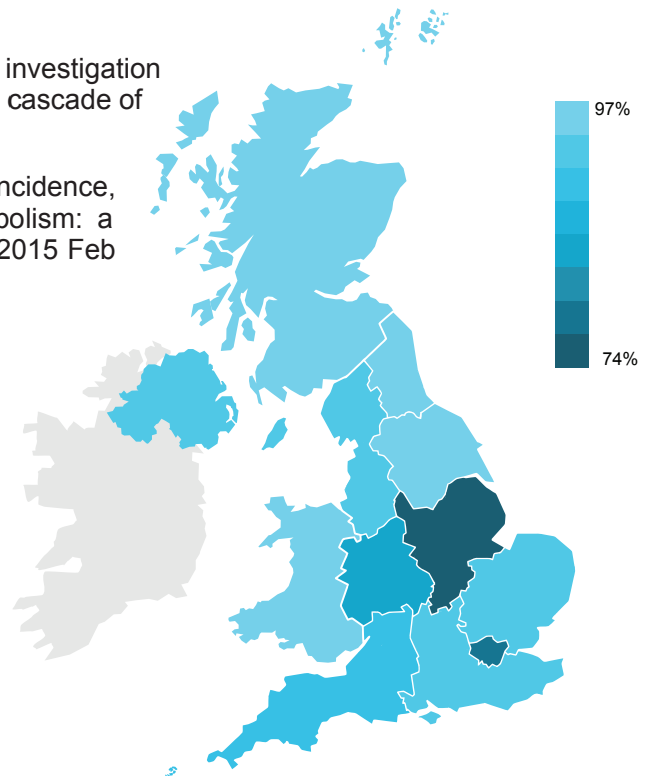
This study looked at all women diagnosed with Amniotic Fluid Embolism (AFE) in the UK between February 2005 and January 2014 who were reported through UKOSS. In total 120 women were identified with 3839 in the control group.

The total incidence of AFE as estimated by the nine-years of the UKOSS study is 1.7 per 100,000 maternities and the estimated fatal incidence is 0.3 per 100,000 maternities. There was no significant temporal trend in either the total or fatal incidence. Similarly there was no notable temporal change in risk factors for AFE during the study period. Older maternal age, multiple pregnancy, placenta praevia and induction of labour were all associated with the occurrence of AFE and instrumental vaginal and caesarean deliveries were associated with the occurrence of AFE postnatally.

During the study period, twenty-three women with AFE died (case fatality 19%) and seven of the surviving women (7%) had permanent neurological injury. Women who died or had permanent neurological injury were more likely to present with cardiac arrest (83% versus 33%,  $p < 0.001$ ), be from ethnic minority groups (adjusted odds ratio (aOR) 2.85, 95% CI 1.02-8.00), have had a hysterectomy (unadjusted odds ratio (uOR) 2.49, 95% CI 1.02-6.06), had a shorter time interval between the AFE event and when the hysterectomy was performed (median interval 77 minutes versus 248 minutes,  $p = 0.0315$ ) and were less likely to receive cryoprecipitate (uOR 0.30, 95% CI 0.11-0.80).

This may reflect severity of disease at presentation, thus further investigation is needed to establish whether earlier treatments can reverse the cascade of deterioration leading to severe outcomes.

**Reference:** Fitzpatrick KE, Tuffnell D, Kurinczuk JJ, Knight M. Incidence, risk factors, management and outcomes of amniotic-fluid embolism: a population-based cohort and nested case-control study. BJOG. 2015 Feb 12. doi: 10.1111/1471-0528.13300. [Epub ahead of print]



UKOSS Regional Card Return Rates Map  
December 2014 to February 2015

THIS MONTH

- New Cystic Fibrosis study starting soon
- Fond farewell to a member of the UKOSS team



Thanks to the following hospitals who have returned cards for November 2014, December 2014 and January 2015:

Aberdeen Maternity Hospital, Aberdeen  
Airedale General Hospital, Keighley  
Alexandra Hospital, Redditch  
Altnagelvin Area Hospital, Londonderry  
Antrim Hospital, Antrim  
Ayrshire Maternity Unit, Kilmarnock  
Barnsley Hospital NHS Foundation Trust, Barnsley  
Basildon Hospital, Canvey Island  
Bassetlaw District General Hospital, Worksop  
Bedford Hospital, Bedford  
Birmingham City Hospital, Birmingham  
Birmingham Heartlands Hospital, Birmingham  
Birmingham Women's Hospital, Birmingham  
Borders General Hospital, Borders  
Bradford Royal Infirmary, Bradford  
Bronglais Hospital, Aberystwyth  
Broomfield Hospital, Chelmsford  
Caitness General Hospital, Wick  
Calderdale Royal Hospital, Halifax  
Chesterfield & North Derbyshire Royal Hospital, Chesterfield  
City Hospitals Sunderland NHS Trust, Sunderland  
Countess of Chester Hospital, Chester  
Craigavon Area Hospital, Portadown  
Croydon University Hospital, Thornton Heath  
Cumberland Infirmary, Carlisle  
Daisy Hill Hospital, Newry  
Darent Valley Hospital, Dartford  
Darlington Memorial Hospital, Darlington  
Derby Hospitals NHS Foundation Trust, Derby  
Dewsbury and District Hospital, Dewsbury  
Diana Princess of Wales Hospital, Grimsby  
Doncaster Royal Infirmary, Doncaster  
Dorset County Hospital, Dorchester  
Dr Gray's Hospital, Elgin  
Dumfries & Galloway Royal Infirmary, Dumfries  
Ealing Hospital NHS Trust, London  
East Sussex Healthcare NHS Trust, St Leonards-on-Sea  
Epsom General Hospital, Epsom  
Forth Valley Royal Hospital, Larbert  
Frimley Park Hospital, Camberley  
George Eliot Hospital, Nuneaton  
Glan Clwyd District General Hospital, Bodelwyddan  
Gloucestershire Royal Hospital, Gloucester  
Good Hope Hospital, Sutton Coldfield  
Guy's and St Thomas' Hospital, London  
Harrogate District Hospital, Harrogate  
Hereford County Hospital, Hereford  
Hinchingsbrooke Hospital NHS Trust, Huntingdon  
Homerton University Hospital, London  
Hull Royal Infirmary, Hull  
Ipswich Hospital, Ipswich  
James Cook University Hospital, Middlesbrough  
James Paget University Hospitals Trust, Great Yarmouth  
Jersey General Hospital, St Helier  
Kettering General Hospital, Kettering  
King's College Hospital, London  
King's Mill Hospital, Sutton in Ashfield  
Lancashire Women and Newborn Centre, Burnley  
Leeds General Infirmary, Leeds  
Leighton Hospital, Crewe  
Lister Hospital, Stevenage  
Liverpool Women's Hospital, Liverpool  
Luton & Dunstable Hospital, Luton  
Macclesfield District General Hospital, Macclesfield  
Medway Maritime Hospital, Gillingham  
Milton Keynes Hospital NHS Foundation Trust, Milton Keynes  
Nevill Hall Hospital, Abergavenny  
New Cross Hospital, Wolverhampton  
Nobles Hospital, Douglas  
Norfolk & Norwich University Hospital, Norwich  
North Devon District Hospital, Barnstaple  
North Manchester General Hospital, Manchester  
Northampton General Hospital, Northampton  
Northwick Park Hospital, Harrow  
Nottingham City Hospital, Nottingham  
Nottingham University Hospitals NHS Trust, Nottingham  
Peterborough City Hospital, Peterborough  
Prince Charles Hospital, Methyr Tydfil  
Princess Alexandra Hospital, Harlow  
Princess Anne Hospital, Southampton  
Princess of Wales Hospital, Bridgend  
Princess Royal Maternity Hospital, Glasgow  
Queen Alexandra Hospital, Portsmouth  
Queen Elizabeth Hospital, Gateshead  
Queen Elizabeth Hospital, Kings Lynn  
Queen Elizabeth Hospital, London  
Queen Elizabeth the Queen Mother Hospital, Margate  
Queen's Hospital, Burton upon Trent  
Queen's Hospital, Romford  
Raigmore Hospital, Inverness  
Rotherham District General Hospital, Rotherham  
Royal Albert Edward Infirmary, Wigan  
Royal Berkshire Hospital, Reading  
Royal Bolton Hospital, Bolton  
Royal Cornwall Hospital, Truro  
Royal Devon & Exeter Hospital, Exeter  
Royal Glamorgan Hospital, Llantrisant  
Royal Lancaster Infirmary, Lancaster  
Royal London Hospital, London  
Royal Oldham Hospital, Oldham  
Royal Surrey County Hospital, Guildford  
Royal Sussex County Hospital, Brighton  
Royal United Hospital, Bath  
Royal Victoria Infirmary, Newcastle-upon-Tyne  
Russells Hall Hospital, Dudley  
Salisbury District Hospital, Salisbury  
Scarborough Hospital, Scarborough  
Scunthorpe General Hospital, Scunthorpe  
Simpson Centre for Reproductive Health, Edinburgh  
Singleton Hospital, Swansea  
South Tyneside NHS Foundation Trust, South Shields  
South West Acute Hospital, Enniskillen  
Southend University Hospital NHS FT, Westcliff-on-Sea  
Southern General Hospital, Glasgow  
Southmead Hospital, Bristol  
Southport & Ormskirk Hospital NHS Trust, Ormskirk  
St George's Hospital, London  
St James's University Hospital, Leeds  
St John's Hospital, Livingston  
St Mary's Hospital, London  
St Mary's Hospital, Manchester  
St Mary's Hospital, Newport  
St Michael's Hospital, Bristol  
St Peter's Hospital, Chertsey  
St Richard's Hospital, Chichester  
Stoke Mandeville Hospital, Aylesbury  
Tameside General Hospital, Ashton-under-Lyne  
Taunton and Somerset Hospital, Taunton  
The Great Western Hospitals NHS Foundation Trust, Swindon  
The Jessop Wing, Sheffield  
The Tunbridge Wells Hospital, Tunbridge Wells  
Torbay Hospital, Torquay  
University College Hospital, London  
Ulster Hospital, Belfast  
University Hospital of Coventry & Warwickshire, Coventry  
University Hospital of North Durham, Durham  
University Hospital of North Staffordshire, Stoke on Trent  
University Hospital of North Tees, Stockton-on-Tees  
University Hospital of Wales, Cardiff  
Victoria Hospital, Blackpool  
Victoria Hospital, Kirkcaldy  
Wansbeck General Hospital, Ashington  
Warrington and Malton Hospitals NHS FT, Warrington  
Warwick Hospital, Warwick  
West Cumberland Hospital, Whitehaven  
West Middlesex University Hospital, Isleworth  
West Suffolk Hospital, Bury St Edmunds  
West Wales General Hospital, Carmarthen  
Western Isles Hospital, Stornoway  
Wexham Park Hospital, Slough  
Whiston Hospital, Prescot  
Whittington Hospital, London  
William Harvey Hospital, Ashford  
Wishaw General Hospital, Wishaw  
Worcestershire Royal Hospital, Worcester  
Worthing Hospital, Worthing  
Wrexham Maelor Hospital, Wrexham  
Wythenshawe Hospital, Manchester  
York Hospital, York  
Ysbyty Gwynedd District General Hospital, Bangor  
Arrow Park Hospital, Wirral  
Barnet and Chase Farm NHS Trust Maternity Unit, Barnet  
Causeway Hospital, Coleraine  
Chelsea & Westminster Hospital, London  
Colchester General Hospital, Colchester  
Derriford Hospital, Plymouth  
East Surrey Hospital, Redhill  
Furness General Hospital, Barrow-in-Furness  
Horton Maternity Hospital, Banbury  
John Radcliffe Hospital, Oxford  
Kingston Hospital, Kingston upon Thames  
Lincoln County Hospital, Lincoln  
Manor Hospital, Walsall  
Ninewells Hospital & Medical School, Dundee  
North Hampshire Hospital, Basingstoke  
North Middlesex University Hospital, Edmonton  
Pilgrim Hospital, Boston  
Pinderfields General Hospital, Wakefield  
Princess Elizabeth Hospital, St Martins  
Princess Royal Hospital, Haywards Heath  
Princess Royal University Hospital, Orpington  
Queen Charlotte's and Chelsea Hospital, London  
Rosie Maternity Hospital, Cambridge  
Royal Alexandra Hospital, Paisley  
Royal Free Hospital, London  
Royal Gwent Hospital, Newport  
Royal Hampshire County Hospital, Winchester  
Royal Jubilee Maternity Service, Belfast  
Royal Preston Hospital, Preston  
Scunthorpe General Hospital, Scunthorpe  
St James's University Hospital, Leeds  
Stepping Hill Hospital, Stockport  
The Hillingdon Hospitals NHS Foundation Trust, Uxbridge  
The Portland Hospital, London  
University Hospital Lewisham, London  
Watford General Hospital, Watford  
Whipps Cross University Trust Hospital, London  
Yeovil Women's Hospital, Yeovil  
Leicester Royal Infirmary, Leicester  
Newham General Hospital, London  
Poole Hospital, Poole  
Princess Royal Hospital, Telford  
St Helier Hospital, Carshalton  
Leicester General Hospital, Leicester

Returned all three cards. Returned two cards. Returned one card. No Cards Returned.



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## New UKOSS study – Cystic Fibrosis

**Background:** Advances in the care of people with cystic fibrosis (CF) have led to increasing survival, such that the median predicted survival age for patients in the UK with CF is now 41.4 years, and 53.1% of all females with the disease are over the age of sixteen. Fertility in menstruating females with CF is near normal, and increasingly medical professionals are confronted with issues regarding fertility, family planning and pregnancy in this patient group.

Pre-pregnancy lung function is often cited as the most important factor in predicting the outcome of pregnancy for both mother and baby. Maternal forced expiratory volume in one minute (FEV<sub>1</sub>) of less than 60% correlates with increased risk of premature delivery, delivery by caesarean section and adverse fetal outcomes such as low birth weight and perinatal death. Based on the limited published evidence, a guideline was published in 2008 for the management of pregnant women with CF which states that along with pre-existing pulmonary hypertension and cor pulmonale, an FEV<sub>1</sub> of less than 50% predicted should be suggested as an absolute contraindication to pregnancy. However, successful pregnancies have been documented in women with much greater impairment in lung function and pre-pregnancy FEV<sub>1</sub> between 20% and 30% predicted are reported, leading to the suggestion that advising such women to avoid pregnancy may be unwarranted. Further study is clearly necessary to clarify the current outcomes for pregnancy in women with CF across the spectrum of lung function.

It is hoped that the results obtained from this study will guide medical professionals in supporting the care of women both planning and during pregnancy and ultimately enabling them to make informed choices regarding pregnancy and planning a family.

**Objective:** To use the UK Obstetric Surveillance System (UKOSS) to determine the incidence and risk factors of CF in pregnancy and examine the management of the condition as well as maternal and neonatal outcomes.

**Surveillance period:** March 2015 – February 2016.

**Case Definition:** All pregnant women with a diagnosis of CF confirmed by CF mutation genotyping either prior to or during the current pregnancy who are booked for antenatal care in a UK obstetric unit.

**Lead Investigator:** Lucy Mackillop, Consultant in Obstetric Medicine, John Radcliffe Hospital, Oxford.

### Gastric Bypass Study Extension!

We are pleased to announce that the Gastric Bypass study is to be extended for another 12 months. We will therefore now be collecting data until 31st March 2016.



### Case report summary for current studies up until the end of February 2015

Disorder	Actual number of reported cases	Data collection forms returned (%)	Number of confirmed cases (%)	Expected number of confirmed cases
Adrenal Tumours (study ended 28/02/15)	33	31 (94)	12 (39)	77
Amniotic Fluid Embolism*	205	198 (97)	138 (70)	121
Anaphylaxis*	48	43 (90)	29 (67)	72
Artificial Heart Valves (study ended 30/01/15)	78	63 (81)	49 (78)	130
Aspiration in Pregnancy*	6	5 (83)	4 (80)	22
Epidural, Haematoma or Abscess	12	6 (50)	6 (100)	2
Gastric Bypass in Pregnancy	124	84 (68)	59 (70)	33
Primary ITP (study ended 30/01/15)	197	151 (77)	107 (71)	166
Vasa Praevia	15	4 (27)	1 (25)	33

**Funding:** \* This study represents independent research funded by the National Institute for Health Research (NIHR) under its Programme Grants for Applied Research Programme (Programme Grant RP-PG-0608-10038)

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\*Search your app store for 'qr code'





## GMC Revalidation and NMC Continual Professional Development

We are aware that as part of your GMC revalidation or NMC Continual Professional Development, you are required to provide evidence of participation in national audit and research. If any UKOSS reporters would like to receive a certificate confirming their contribution to UKOSS, please email us at [ukoss@npeu.ox.ac.uk](mailto:ukoss@npeu.ox.ac.uk) and we will get one posted out to you.



### Fond farewell to a member of the UKOSS team

Patsy Spark, a Senior Programmer at the NPEU who has worked with UKOSS for many years, is due to retire this month and will be much missed by the UKOSS team. Before she goes, Melanie O'Connor, UKOSS/UKNeS Programme Manager, interviews Patsy about her time with UKOSS.

**MO'C:** Please could you summarise your role in UKOSS?

**PS:** I am the programmer for UKOSS, designing and programming all the systems to make UKOSS function as a high quality reporting system. The system has to ensure the admin team are prompted to print the cards on time, data can be efficiently entered, queries produced and sent out and a record kept of all outstanding forms and queries.

**MO'C:** How long have you worked with UKOSS?

**PS:** I have worked with UKOSS since it was a twinkle in Professor Knight's eye, about 10 years.

**MO'C:** Can you give a brief overview of your career to date?

**PS:** I started my programming career with a water company, creating programs for irrigation research. During this time I gained a degree in Maths and Computing with the Open University. I moved to medical research with Oxford University in 1998 and worked for 6 years on the Magpie Trial before moving to the NPEU. In addition to UKOSS, I have worked on the CORONIS trial for the past 7 years.

**MO'C:** What do you enjoy most about working with UKOSS?

**PS:** Unlike a clinical trial where there is only one set of data collection forms to design and program, UKOSS has collected data for 44 different conditions over the last 10 years that may affect women during their pregnancies. This means I never got bored!!

**MO'C:** What has been the biggest challenge you've encountered whilst working with UKOSS?

**PS:** Where there have been time constraints and I have had to work long hours has been the biggest challenge. Getting the database and program design correct at the beginning (including data entry forms for 5 studies!) was essential so that it could be flexible but functional and in 2009 ensuring the Pandemic Influenza study was up and running in a few weeks have been the biggest challenges.

**MO'C:** As mentioned above you will be retiring this month, how do you plan to spend your retirement?

**PS:** I am moving to Wales where I will be making a garden and keeping chickens. I will be living with my son and his children, so there is no hope of putting my feet up!



**The UKOSS team would like to say a big thank you to Patsy and wish her a very happy retirement.**

### Chocolate Box



Chocolates this month go to Shamaura Prause from University College London for accurate form completion and Christine Edwards from Gloucestershire Royal Hospital for timely return of monthly cards and data collection forms.

*Many thanks to you both!*



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