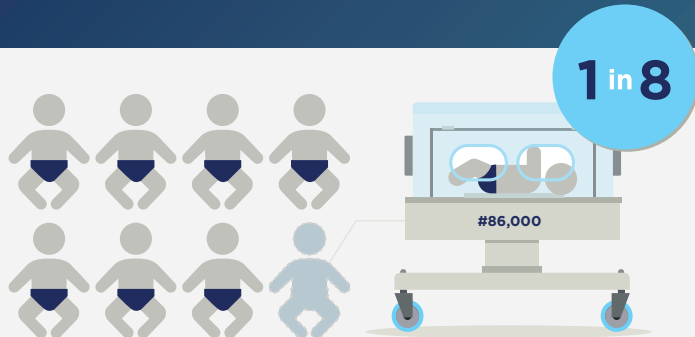


Your baby's care

Measuring standards and
improving neonatal care



A guide to the
**National Neonatal
Audit Programme**
2015 Annual Report



Neonatal Unit Admission

Approximately **1 out of every 8** babies born in England and Wales each year (or 86,000 out of 700,000) needs specialist neonatal care in hospital.



Neonatal Care

One in eight babies born in the UK will spend at least a few days in hospital in a neonatal unit which specialises in looking after babies who are born early, with a low weight or who have a medical condition that requires specialised treatment.

Some babies may need breathing support or monitoring, or may be suffering from other medical conditions. Other babies may have an infection and need antibiotics. The length of a baby's stay may vary from days to weeks or months, depending on their needs.

What is the National Neonatal Audit Programme?

It is very important that the standards of care provided by neonatal units are monitored regularly. The Royal College of Paediatrics and Child Health (RCPCH) does this through the National Neonatal Audit Programme (NNAP).

Since it was set up in 2006, the NNAP has monitored and reported on neonatal care processes to help ensure that all babies admitted to neonatal units in England and Wales have the best chance of survival and reaching

their full potential. The NNAP looks for areas where the care of babies on neonatal units can be improved and makes recommendations on how those improvements could be made and by whom.



The NNAP currently covers neonatal units in England and Wales and it is anticipated that units in Northern Ireland and Scotland will join the audit in the near future.

The work of the NNAP is overseen by the members of a project board comprised of

NNAP project staff based at the RCPCH, a lead clinician who is an experienced consultant neonatologist, parents, healthcare professionals and representatives from a range of organisations including UK charity, **Bliss**.

What does the NNAP do?

The purpose of the NNAP is to view the information that has been collected about care provided for premature or sick babies admitted to all three levels of neonatal units (Special Care Unit, Local Neonatal Unit and Neonatal Intensive Care Unit) throughout England and Wales within each calendar year.

The NNAP monitors whether the care that has

been provided matches up to professionally agreed standards. By identifying the areas which require improvement, the NNAP informs action planning at an individual unit and network level, whilst also helping hospital management, commissioners and policymakers prioritise future funding and support for neonatal services.

★ *Why is the NNAP important for you and your baby?*

The care that your baby is receiving whilst in a neonatal unit is expected to conform to a set of professionally agreed standards.

The NNAP exists to monitor, and publicly report how closely all neonatal units are

adhering to those standards. Understanding what those standards are should help you to discuss aspects of your baby's care with the neonatal unit staff who are looking after your baby.

★ *What aspects of care does the NNAP focus on?*

The NNAP 2015 Annual Report on 2014 data looked at nine areas of care ("audit measures") for preterm and sick babies.

These nine areas were chosen by a group including parents and experts in neonatal care because they are particularly important for the development and well-being of babies and their families. The audit measures for 2014 were:

- Antenatal steroids
- Temperature on admission
- Consultation with parents
- Recording of blood stream and cerebrospinal fluid cultures
- Prevalence of central line associated blood stream infections
- Neonatal unit transfers
- Retinopathy of prematurity (ROP) screening
- Mother's milk at discharge
- Clinical follow-up at two years of age.

The 2015 report looks at data relating to how these nine areas of care were provided to 86,237 babies by 174 neonatal units across England and Wales.

Set out on the following pages are more details about these nine audit measures including the actual questions that the NNAP asks and why it asks them.

Some of the audit measures are particularly important for babies born at a certain gestation and that is reflected in the way that the questions were set out.



Measuring standards and improving neonatal care



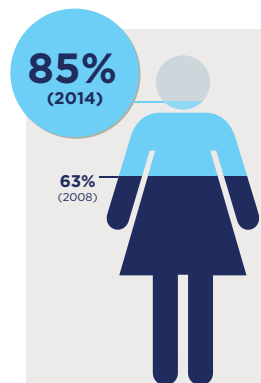
Antenatal steroids

Question: Are all mothers who deliver babies between 24 and 34 weeks gestation inclusive given any dose of antenatal steroids?

Babies who are born at less than 34 weeks gestation are more likely to struggle with their breathing when they are born. This is called 'respiratory distress of the newborn'. When your baby is born the doctors and nurses will know to look out for this and will know how to treat it appropriately. Giving mothers who are about to give birth to a baby at less than 34 weeks gestation antenatal steroids can help to reduce this respiratory distress, and also decrease the risk of other serious problems.

The medicine needs some time to work and unfortunately in cases where a baby is delivered soon after a mother is admitted, there may not be sufficient time for the antenatal steroids to be given before the baby is born.

The NNAP project board would like as many mothers as possible to be given antenatal steroids if they are about to deliver a baby at less than 34 weeks gestation.



Antenatal steroids

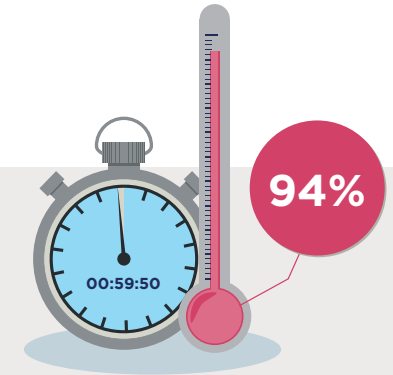
85% of mothers who delivered babies born between 24 and 34 weeks of gestation received one or more doses of antenatal steroids, a considerable increase from **63%** in 2008.

Temperature on admission

Question: Do all babies born at less than 29 weeks gestation have their temperature taken within an hour after birth?

Low admission temperature has been associated with babies being more unwell. Babies who are born very early, at less than 29 weeks gestation, are very vulnerable to getting cold and it is important that doctors and nurses record the baby's temperature so that they can take action to warm the baby.

If a baby is too cold or too hot then doctors and nurses need to know this to make sure they give the right care to get the baby's temperature back to normal.

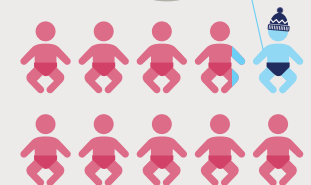


Temperature on admission

94% of all babies less than 29 weeks gestation at birth had their temperature measured within an hour of birth.

12.4%
<36.0°C

Where temperatures were measured, more than **one baby in ten** (12.4%) had a temperature below 36.0°C within an hour of birth.



Consultation with parents

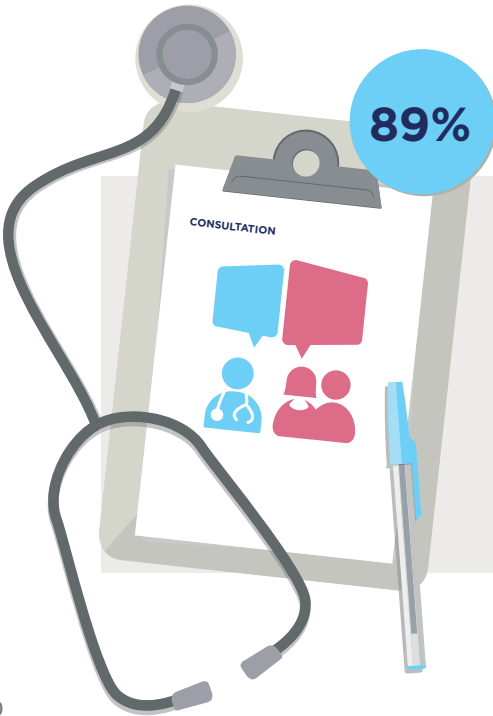
Question: *Is there a documented consultation with parents by a senior member of the neonatal team within 24 hours of admission?*

This measure of care looks at whether parents have been spoken to by a senior member of the neonatal team within the first 24 hours of their baby being admitted to the unit.

It also looks at whether details of that discussion are documented, and applies to

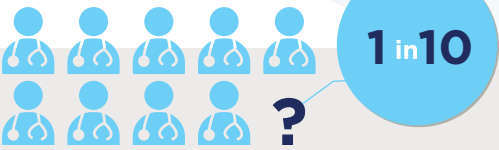
ALL babies who require care on a neonatal unit.

It is important that families understand and feel involved in the care of their baby. Doctors and nurses should take the time to explain to families how their baby is being cared for and to answer any questions that parents may have.



Consultation with parents

In **89%** of cases there was a documented conversation with a senior member of the neonatal team within 24 hours of the baby's admission to the unit.



This represents an increase from 84% in 2013 but means that in more than **1 in 10** cases parents may not have had a timely explanation of their baby's illness and treatment.

Neonatal unit transfers

Question: Are all babies accessing neonatal services treated in their own network (except where clinical reasons dictate)?

In the UK, neonatal care is provided by three different levels of unit (Special Care Unit, Local Neonatal Unit and Neonatal Intensive Care Unit) which have different levels of skills and specialties.

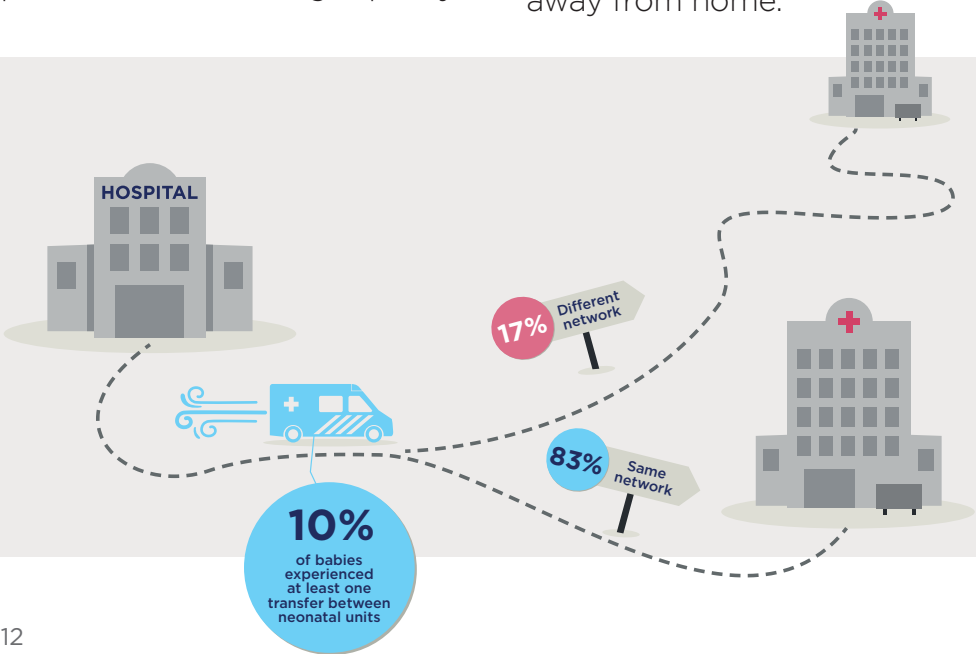
These neonatal units are grouped together within a geographical location, known as a 'network'. The hospitals in each network aim to work together to provide a safe and high quality

service for babies who require specialist neonatal care.

There are occasions when a baby may need to be transferred to another unit that has a level of care that is more appropriate to his or her needs at the time.

At times it may not be possible to do this within the network where the baby's parents live and this may require transferring the baby to a hospital further away from home.

Ideally, babies and families should have access to care as close to home as possible. This measure of care monitors the number of babies who are transferred both from one unit to another within the same network and outside of the original network. It encourages networks to assess the reasons for transfers and work towards minimising long transfers which may impact upon babies and their families.



★ Recording of blood stream and cerebrospinal fluid cultures

Question: What percentage of babies admitted to a neonatal unit had a recording of bloodstream and cerebrospinal fluid (CSF) cultures?

Bacteria that usually live on the skin, and within the bowel, of healthy adults can cause serious infections in sick, and premature babies.

Neonatal units are very aware of this risk and employ stringent measures to reduce the possibility of infection.

To look for infection in infants doctors and nurses commonly

take a small sample of blood, known as a blood culture.

There are also times when doctors may take a small sample of fluid from the spine (known as a cerebrospinal fluid culture) instead of a blood vessel. Sampling of cerebrospinal fluid is essential for the accurate diagnosis of meningitis.

★ Central line associated blood stream infections

Question: How many bloodstream infections are there on a NNU per 1000 days of central line care?

Many babies on the neonatal unit have thin plastic tubes, or 'lines' that go into their veins to give them medication and nutrition. These are known as 'central lines' and there are a number of different types, but they all generally do the same thing. Central lines are essential to premature and sick babies to give them the vital treatments

that they need however they do increase the possibility of infection by providing a point of entry for infection to get through a baby's skin.

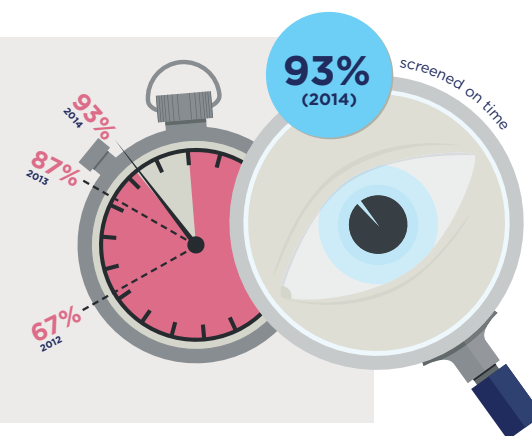
The NNAP monitors infection rates in neonatal units in order to provide important information and feedback to neonatal units which can help them in their efforts to reduce infection.

★ Retinopathy of prematurity screening

Question: Are all babies with a gestational age at birth of less than 32 weeks or less than 1501g at birth undergoing first Retinopathy of Prematurity (ROP) screening in accordance with the current national guideline recommendations?

Screening for Retinopathy of Prematurity

93% of eligible babies were screened "on time" in accordance with the time-frames set out in the national guideline rising from 67% in 2012 and 87% in 2013.



From looking after babies born prematurely for many years, doctors and specialists have learnt that babies that are born early at less than 32 weeks gestation, or with a birth weight of less than 1501g (whatever their gestational age), are at risk of a condition that affects the eyes called Retinopathy of Prematurity (ROP). With this condition the blood vessels in the back of the eye do not develop

normally and this can lead to loss of vision. If doctors and specialists look for ROP in those babies at risk of having it they can monitor them and treat the ROP, if treatment is needed.

ROP has no signs or symptoms. The only way to look for it is through an eye screening examination. There is national guidance on when this should be done, depending on the gestational age and weight of a baby.

Sometimes babies may be too unwell to have the eye examination, but the NNAP project board would like as many babies as possible to have the eye examinations to look for ROP at the right time for them. Loss of vision from ROP is largely preventable if babies are screened and treated on time in line with the national guideline.



Mother's milk at discharge

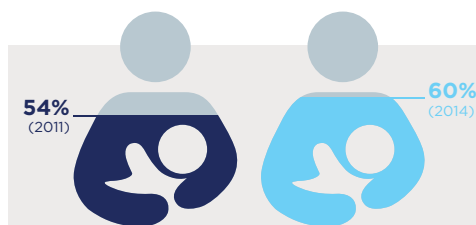
Question: *What proportion of babies born at less than 33 weeks gestation are receiving any of their mother's milk when discharged from a neonatal unit?*

Mothers transfer protective antibodies to their babies through the placenta during the last three months of pregnancy. This process is interrupted when the baby is born prematurely. For this reason, premature babies are especially vulnerable to infection. The good news is that mothers also give their babies antibodies in their breast milk providing their baby with an extra line

of defence. Feeding can however be a very stressful time for parents of premature babies and some mothers may experience problems with breast feeding. While premature or sick babies may not be ready to feed straight from their mother's breast, mothers can still provide milk from their breast by using a technique called expressing. Expressing breast milk is a skill that can take time to learn, and

neonatal unit staff can provide positive support and practical help with this.

Due to all of the advantages of breast milk, the NNAP project board would like as many very premature babies as possible to receive their own mother's breast milk (whether by breast feeding directly or with expressed milk) and go home from neonatal units feeding with breast milk.



Mother's Milk at discharge

60% of eligible babies were receiving their mother's milk, either exclusively or with another form of feeding, at the time of their discharge from neonatal care.

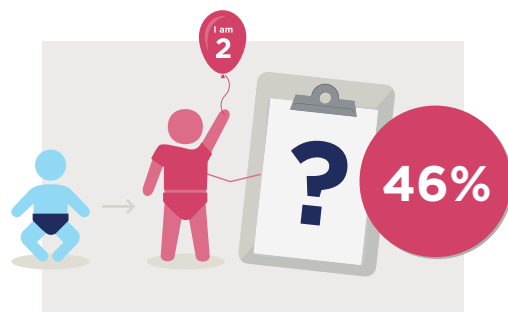
Maternal breastmilk feeding at discharge has risen slightly over the past four years from **54%** in 2011 to the current rate of **60%**.

Clinical follow-up at 2 years of age

Question: *Are rates of normal survival at two years comparable in similar babies from similar neonatal units? (In 2014 the NNAP looked at the results for babies who were born at less than 30 weeks gestation between July 2011 and June 2012).*

This audit measure looks at whether there are significant problems with movement, the senses, delay in development, or with any of the other organ systems 2 years from the due date for babies who were born at a gestational age of less than 30 weeks.

Babies that are born early are more at risk of having such problems and it is important for those involved in the care of premature babies to know how the babies are developing as they get older. Your baby's development should be regularly assessed and monitored by their healthcare professional. This will help reassure you if your baby is doing well, enable any difficulties to be acted on early and also address any concerns you may have.



The NNAP found that in 2014 there was no 2 year follow up data recorded for 46% of babies born at less than 30 weeks between July 2011 and June 2012. This suggests that, either neonatal units are not doing the 2 year follow up consultations or that they are recording the findings elsewhere.

It is crucial that parents and clinicians work together to ensure that these vital follow up appointments do take place and that the details of them are recorded for the NNAP.

Would you like to know more?

You can find out more about the NNAP and download a copy of the full NNAP 2015 Annual Report, including all of the key findings and recommendations, at:

www.rcpch.ac.uk/nnap

Please contact the NNAP Project Team with any queries, or to provide feedback on this publication at:

nnap@rcpch.ac.uk

The RCPCH would like to give special thanks to the parent representatives on the NNAP project board for their input and guidance in the development of this report and for their kind permission to use

images of their own babies within it.

If you would like to discuss how any of the NNAP findings relate to your baby's care, please ask your baby's nurse or speak to one of the medical staff.

Bliss is the UK charity working to provide the best possible care and support for all premature and sick babies and their families. Bliss exists to ensure that all babies born too soon, too small or too sick in the UK have the best possible chance of survival and are reaching their full potential. For more information on Bliss please visit: **www.bliss.org.uk**

Parents,
Carers & Us[®]

& Us is the RCPCH's platform for children, young people and families to help improve child health and healthcare for young patients.

Join **& Us** and help make the NHS a better place:
www.rcpch.ac.uk/and_us



Information for parents and carers:

Written consent is not required for submission of patient data to the NNAP, however parents should be aware that data on their baby's neonatal care is being utilised, and that they can choose to opt out of having their baby's data submitted to the audit. The data that the NNAP collects and analyses is encrypted and stored securely. For further information on how to opt out contact the NNAP team at: **nnap@rcpch.ac.uk**

A guide to the
**National Neonatal
Audit Programme**
2015 Annual Report



The National Neonatal Audit Programme is commissioned and sponsored by the Healthcare Quality Improvement Partnership (HQIP) as part of the National Clinical Audit Programme.

The programme is funded by NHS England and the Welsh Government.



Royal College of
Paediatrics and Child Health

Leading the way in Children's Health

Royal College of
Paediatrics and Child Health,
5-11 Theobalds Road,
London, WC1X 8SH

The Royal College of Paediatrics and Child Health (RCPCH)
is a registered charity in England and Wales (1057744) and in Scotland (SC038299)
