



# Improving the Outcome for Preterm Babies: Information for Parents

There are 7 key treatments that may help improve the outcome for early (preterm) babies. Preterm is before 37 weeks of pregnancy. These treatments are known as the Optimisation Care Bundle. This leaflet will explain how this bundle can help your baby.

We understand that this can be a very stressful time for you as parents and we want to make sure that you feel included in all decisions made around you and your baby's care. If you have any questions or would like to find out more about any of the information in this leaflet, please speak to one of the doctors or midwives looking after you. If there is time before your baby's birth, you should be able to talk to

some of the team from the neonatal unit, who will explain what to expect when your baby is born early.

A team of specialist doctors and nurses from the baby unit will be there when your baby is born and will care for you and your baby after the birth. The team will continue to be there for you and your family, however, at the end of this leaflet is a list of organisations who can offer additional support following your experience of preterm birth. We encourage you to reach out when you feel it is the best time for you. We advise you to be careful when doing internet searches as some other online resources may have incorrect information.

## What is the Optimisation Care Bundle?

The Optimisation Care Bundle is made up of 7 treatments. Each one aims to improve outcomes for preterm babies, reducing the risk of long-term health and developmental problems.

Every pregnancy and every baby are different, and all of the treatments may not be needed. This will depend on how many weeks pregnant you are when your baby is born, timing of birth and specific medical needs for you or your baby.

Please know that the team will do everything they can to prepare your baby for birth.

### Preterm Perinatal Optimisation Care Bundle



#### Place of Birth

Extreme preterm birth in a unit with a hospital with an intensive care unit improves survival and neurodevelopmental outcomes



#### Antenatal Steroids

The use of antenatal steroids significantly improves survival by reducing the risk of preterm lung disease, brain bleeds, bowel problems and infection



#### Magnesium Sulphate

The use of magnesium sulphate within 24 hours before birth significantly reduces the risk of conditions that affect movement and coordination (cerebral palsy)



#### Intrapartum Antibiotics

The use of antibiotics 4 hours before birth significantly improves survival by reducing the risk of infection



#### Optimal Cord Management

Optimal cord management significantly improves survival by reducing the risk of brain bleeds as well as the need for blood transfusion



#### Keeping your baby warm

Low temperature (<36.5°C) increases the risk of death and brain bleeds, bowel conditions and infection. Emerging evidence links early high temperatures (>38°C) to adverse outcomes



#### Maternal Breast Milk

The safest milk for preterm babies is maternal breast milk as it significantly improves survival by reducing the risk of infection and bowel conditions

We will try to explain each of these things as clearly as possible and give you the opportunity to ask for more information. If you feel that anything has not been discussed with you in enough detail for your specific circumstance, we want you to feel comfortable to talk to the team about what is right for you and your baby.

## Place of birth

Most parents choose the hospital where they would like to have their baby. This is often the closest hospital to their home. However, if your baby is very small or less than 30 weeks (32 weeks in certain units), they may initially need intensive care so it is better for them to be born at a hospital with a specialist Neonatal Intensive Care Unit (NICU).

If you are currently at a hospital without a NICU it is safer for your baby to transfer before birth. This is called an in-utero transfer and means that mothers are transferred before their baby's birth. If your baby is born before you can be transferred to a NICU, all neonatal units can provide short term intensive care, and your baby will be transferred

as soon as possible by the Northern Neonatal Transport Service. We understand that moving to a hospital you don't know may be difficult, but it is much safer for your baby. If there is time before your baby is born you may be offered a tour of the neonatal intensive care unit, which some parents find helpful.

Information about the neonatal units in the North East and North Cumbria can be found on the Northern Neonatal Network website: <https://www.nornet.org.uk/our-network/>



## Antenatal Steroids

Mothers who go into labour before 34 weeks will be offered a course of steroid injections before their baby is born. Antenatal steroids help prepare your baby's lungs to start working and reduce the risk of long-term breathing problems. Ideally, mothers receive two doses of steroids given 24 hours apart.

The steroids are given by an injection usually in the upper thigh or buttock. They may feel uncomfortable but are not usually painful. The benefit from steroids lasts for 7 days, therefore it is important to give them at the right time. If your birth is more than 7 days after you received

steroids, the doctors will discuss with you the benefits and risks of giving a repeat dose.

Some babies may arrive so quickly that there isn't time for steroids to be given or to complete the 2 doses. This is quite common, and the neonatal team will do everything they can to support your baby's lungs if this happens.

If you have any concerns or questions about antenatal steroids, please speak to one of the midwives or doctors.



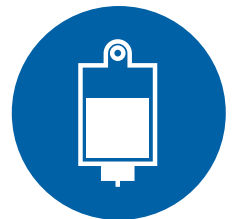
## Magnesium Sulphate

Mothers who go into labour before 30 weeks will be offered a medication called magnesium sulphate. Magnesium sulphate is very effective in protecting your baby's brain and reduces the risk of conditions that affect movement and coordination (cerebral palsy). It ideally needs to be given for 4 hours prior to the birth but a dose anytime up to the birth of your baby can still be helpful.

Magnesium sulphate is given over a period of hours via a drip until your baby is born. You will be closely monitored throughout this time. Some mothers experience short-term

side effects when the drug is first given, for example feeling or being sick, feeling extremely hot or experiencing burning sensations. These side effects are short term and will pass when the magnesium sulphate has ended, if not before.

If you have any concerns regarding magnesium sulphate, please speak to one of the midwives or doctors who will be able to talk you through the process.



## Intrapartum Antibiotics

Intrapartum simply means given during labour. Group B Strep (GBS) is a type of bacteria that can cause infection. It is commonly carried by both men and women. Most people who carry it have no symptoms. If a mother has Group B strep in the vagina, there is a risk that this could be passed to baby during the delivery. In a small number of cases this can result in an infection and make babies very poorly.

The infections commonly caused by Group B Strep in newborn babies are blood infections (sepsis), chest infections, and infection of the brain. Preterm babies are more likely to develop infections, so we recommend

antibiotics during labour. This reduces the chance of your baby becoming unwell with a Group B Strep infection. The antibiotics are given to you via a drip and carry no risk to your baby. If antibiotics are not given prior to your baby's birth due to a quick delivery, please do not worry as they can also be given directly to your baby if necessary.

If you have any concerns regarding antibiotics, please speak to one of the midwives or doctors who will be able to answer any questions you have. For more information about Group B strep go to <https://gbss.org.uk/>



## Optimal cord management (delayed cord clamping)

Immediately after your baby has been born, the team will aim to delay clamping the cord for at least one minute. This is known as optimal cord management or delayed cord clamping.

Delayed cord clamping allows time for extra blood to flow from the placenta to your baby. This can improve the health of your baby by reducing the risk of brain bleeds or the need for a blood transfusion. It can also improve your baby's blood pressure, reduce the risk of problems with

your baby's gut and benefit their brain development.

During this time your baby will be monitored. If waiting one minute is not possible due to medical reasons, the cord will be clamped immediately. There are some situations where delayed cord clamping may not be possible, and your midwife or doctor will discuss this with you.



## Keeping your baby warm

Preterm babies tend to have a lower birth weight and will have less or no fat under their skin. This means that it is harder for them to keep warm, increasing the risk of them becoming very cold. Having a low temperature can be dangerous for your baby, as this may lead to low blood sugars or breathing difficulties. Every effort will be made to keep your baby at a safe body temperature, of between 36.5°C to 37.5°C.

After birth, depending on how many weeks of pregnancy your baby was born, they may be placed in a special plastic bag, which protects your baby's delicate skin and helps to keep them warm. There are different ways the team will manage your baby's temperature, including the

use of a heated cot.

If your baby's condition allows, delivery room cuddles will be encouraged, which is a great way of keeping your baby warm.

During those first few hours of life it is important not to let your baby get cold and your midwife or neonatal nurse will support you with this.

If you have any concerns about the temperature of the room where your baby will be born, please speak to your doctor or midwife.



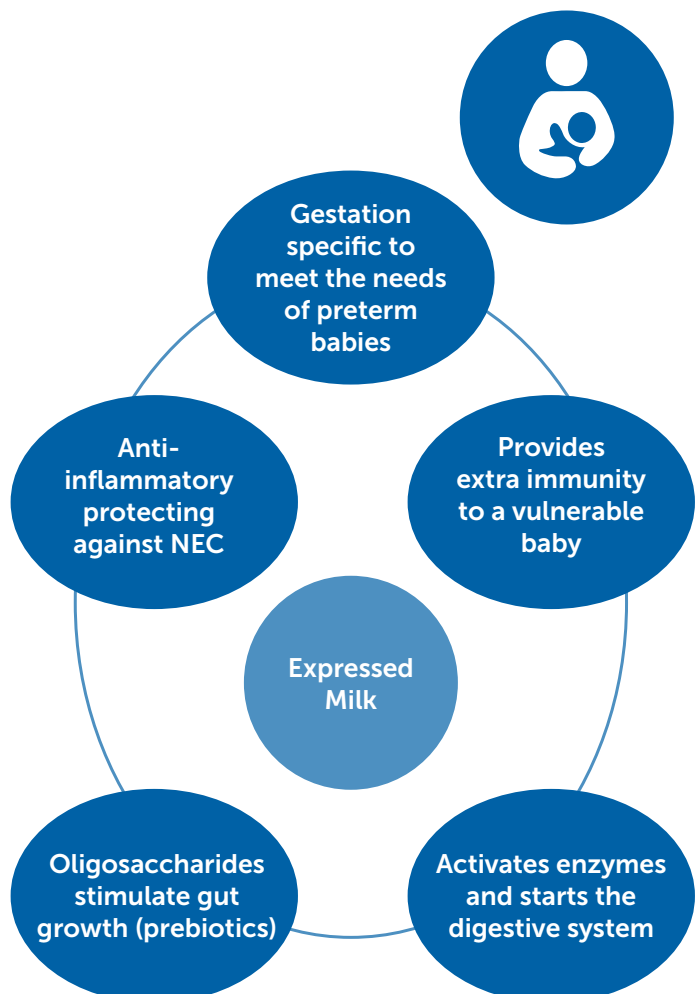
## Early breast milk

You and your partner may have already made a decision about how you want to feed your baby, or you may still be undecided or change your mind if your baby is born prematurely. How you feed your baby is your choice and this decision will be supported by the health professionals looking after your baby.

Formula milk can cause gut problems for preterm babies, and the safest and most protective milk to give your baby is the mother's own breast milk. There are many benefits of your baby receiving early breast milk. Breast milk helps protect preterm babies from infections, particularly a serious bowel problem called necrotising enterocolitis (NEC).

Even the tiniest drops of breast milk given to your baby via tube or mouth care, will make a huge difference to them. Providing your baby with early breast milk will help to boost their immune system and protect them from infection. Therefore, even if you have made the decision not to breast feed, expressing colostrum for your baby (the first milk immediately produced following the birth) is extremely important. Colostrum should be given within the first 24 hours following birth, but ideally within 6 hours.

Mouth care using your milk will give your baby a positive oral experience and their first exposure to taste and smell but there are many other health benefits. The team will support you to provide breast milk for your baby.



Shortly after birth, ideally within 2 hours, you will be shown how to hand express. Some mothers may have already collected some colostrum pre-birth. Please make sure any expressed milk is taken to the neonatal unit. An expressing pack will be provided with everything you will need to collect those first few drops of milk, ready to either give to your baby via a tube or to use for mouth care.

The maternity and neonatal team have lots of experience in supporting mums to express their breast milk. Please do not worry about the amount. Just a couple of drops in those first few hours has lots of benefits.

Partners are important in expressing breast milk, as giving reassurance and encouragement is extremely valuable.

They can support by making sure their partner has what is needed so they are comfortable whilst expressing, talking to them whilst expressing, and encouraging their partner to eat and drink regularly. The Breastfeeding Network is a great resource for information about expressing breast milk.

<https://www.breastfeedingnetwork.org.uk/breastfeeding-help/expressing-storing/>

For more information on lactation in the LGBTQ community, please ask the team looking after you.

A general overview can be found here: [www.hifn.org/sex-gender-orientation](http://www.hifn.org/sex-gender-orientation)

## Further Neonatal Care

**Following your baby's admission to the neonatal unit the team will continue to support your baby in the best way. This will include:**

- Giving caffeine, via a drip, to all babies born before 30 weeks gestation to help their breathing and improve long term outcomes.
- If a breathing machine is required, the use of certain types of breathing support will help reduce long term breathing problems.



## Support for you

Having a baby in neonatal care can be a very stressful time for parents and it is often hard to think about looking after yourself. Sometimes talking to other people who have been through the same thing can be really helpful.

Across the North East and North Cumbria there are various peer support groups or volunteer peer supporters who visit neonatal units. Some units also have counsellors,

psychologists or therapy services.

The Neonatal Unit where your baby is being cared for will advise what support is available, but details of local and national support groups, alongside useful information for throughout your babies stay, can also be found on the Northern Neonatal Network website at:

<https://www.nor-net.org.uk/our-network/>

## Useful websites



[www.bliss.org.uk](http://www.bliss.org.uk)



[www.dadmatters.org.uk](http://www.dadmatters.org.uk)



[www.breastfeedingnetwork.org.uk](http://www.breastfeedingnetwork.org.uk)



[www.tommys.org](http://www.tommys.org)



[www.unicef.org.uk](http://www.unicef.org.uk)

The information in this leaflet has been put together to support the recommendations from the BAPM Optimisation Toolkit which can be accessed at <https://www.bapm.org/pages/104-qi-toolkits>

**This leaflet has been modified with kind permission from:**



Date of review: November 2026

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Version: 1.0

Document owner: North East and North Cumbria Maternity Clinical Network Preterm Birth Group