Newborn Jaundice
Information for Parents

Special Care Baby Unit
What is Jaundice?

Jaundice is when your baby’s skin appears to have a yellow tinge to it. It is quite common for babies over 2-3 days old to become jaundiced and as long as they develop no other symptoms or concerns then this can just be monitored by your midwife with no further interventions needed. Jaundice which occurs at any time from birth to 48 hours of age, is not normal and will require further investigations and may need treatment.

What causes jaundice?

Jaundice is a build-up of a naturally occurring substance in the blood called bilirubin. This is produced by the normal breakdown of red blood cells. As bilirubin begins to build up this makes the skin and the whites of eyes appear yellow. Babies tend to have higher levels of bilirubin as they have extra red blood cells.

If your baby has become jaundiced at less than 24 hours old, this could be due to a number of reasons including: -

1) **Blood group incompatibility:** If you or your baby have a different blood type, then sometimes antibodies can develop that destroy the baby's red blood cells. This can cause very high levels of bilirubin in the baby's blood. This serious type of jaundice usually begins during the first 24 hours of your baby's life.

2) **Infections:** congenital (your baby may have been born with) or may have developed since birth.

3) **Increase in the breakdown of red blood cells:** from bruising or swelling from birth or from the use of forceps or ventouse.

4) **Prematurity:** Your baby’s liver may be too immature and can't breakdown and clear the excess bilirubin properly.
How can I tell if my baby is jaundiced?

In a well-lit room, apply gentle pressure to your baby's nose or forehead. If there's a yellow tinge to their skin as the pressure is released, consult your midwife or doctor. If your baby has dark skin, check for yellowness in the whites of their eyes.

Even if your baby is very yellow, it is unlikely to cause them any long-term harm, but very rarely, when a newborn's bilirubin levels are extremely high, this can lead to damage to the nervous system and brain. This is why it is important that your baby's bilirubin levels or SBRs are monitored and treated if necessary.
What happens if my baby becomes jaundiced? (NHS 2010, NICE 2006)

Your baby will be assessed by a paediatrician (a childrens doctor) who may test your baby’s bilirubin levels, called an SBR. This involves a small blood test. The result of this is then plotted on a graph which takes in to account your baby’s age, in days. This shows if your baby will need treatment and what type to help them reduce the bilirubin to safer levels.

What are the treatments?

The 1st type of treatment is called phototherapy. This is very similar to a sunbed in someways as a special ultraviolet light is placed over your baby’s cot. This light helps to break down the excess bilirubin so that their liver can get rid of it. Depending on the level of your baby’s SBR in relation to the graph your baby may need to have single, double or triple therapy. This just means that they may require more lights or even a special fibre optic blanket, called a biliblanket. The second type of treatment is called exchange transfusion and this is used if your baby’s bilirubin levels are extremely high. This treatment involves your baby’s blood being gradually replaced with suitable blood from a donor. This new blood doesn’t have any bilirubin in it, so the levels in your baby’s blood will fall to a safer level.

During treatment what will happen?

During treatment you will still be able to feed and cuddle your baby. If they are on the biliblanket you will be able to do this as they receive the therapy. If not you will be allowed to have small breaks in which your baby can be removed from the phototherapy to allow for you to continue bonding with your child. Feeding your baby regularly every 2-3 hours is recommended to reduce the jaundice. Occasionally if you are breast feeding, then your baby may need supplementing with formula, temporarily to make sure that they are getting enough to help lower the levels. Your paediatric doctor will tell you if this is
needed. Sometimes if your baby needs high levels of phototherapy a small tube may be passed through your baby’s nose in to their stomach. This is called an nastro-gastric tube (NG) tube. Then breast milk or formula can be put down the tube to make sure your baby is getting enough feed and also allows them to have continuous phototherapy.

Your baby will require regular blood tests to make sure that the bilirubin/SBR levels are falling. They may also require some extra blood tests to identify the cause of jaundice.

**Are there Side Effects of Phototherapy?**

Babies under any type of phototherapy treatment will have frequent and loose bowel movements that are sometimes greenish in colour. This is normal since this is the way the body removes the bilirubin. This will be temporary and should stop when treatment is completed. The strength of light from the phototherapy is about the same, as you would get in the shade on a sunny day, yet is safer because the phototherapy filters out potentially harmful ultraviolet and infrared energy. Your baby will wear an eye guard to protect their eyes from the light. Sometimes they can suffer with dry skin from the light, but this does not cause any discomfort.

**How long will my baby need treatment for?**

The length of treatment needed varies from each baby. It normally takes a few days of phototherapy to make sure that the bilirubin levels are safe and for the liver to be mature enough to handle the bilirubin on its own.

If in any doubt then please see your midwife or doctor. (NHS 2010, NICE 2006)
What should I look for when I get home and what should I do?

If your baby was born full term it will usually take up to a week for their skin to return to normal. It may take a bit longer if they are premature or if you’re breastfeeding. If you are breastfeeding, feed your baby frequently. This will help to clear the jaundice you may need to wake your baby to feed if they are sleepy (NICE 2006).

There is however no need to give formula milk or water instead (NICE 2006).

If any of the following occur or you have any concerns then please contact your midwife or GP for advice.

• If your baby becomes lethargic and very sleepy
• If they are off their feed. If they are not wanting to feed or only taking very little.
• If they develop a fever- temp greater than 37.6.
• If their stools/poo turn pale or urine dark
• If their soft spot on the top of their head, is very depressed or dipped (which is unusual for them, as in some babies this can be normal).
• If the jaundice goes on for longer than 14 days (prolonged jaundice)
• If the jaundice started less than 24 hours after birth
• If your baby is very jaundiced
• If the jaundice seems to be getting worse
For further information about this service contact:

Dr Hilary Dixon  
Paediatrics and Neonatal Consultant  
SCBU/Neonatal and Paediatric Department  
Holly Ward  
Hinchingbrooke Hospital  
Huntingdon  
Cambridgeshire

Telephone 01480 416416 then ask to be put through to Dr Dixon's secretary or Holly Ward.

Email: hilary.dixon@nhs.net

If you require this information in a different format such as in large print or on audio tape, or in a different language please contact the service on the details above.

If you have any concerns about this service or suggestions for improvements, contact our Patient Advice and Liaison Service on Freephone 0800 013 2511 or email: ccs-tr.pals@nhs.net.

For free, confidential health advice and information 24 hours a day, 365 days a year please contact NHS 111.