

JAUNDICE AND YOUR NEWBORN BABY



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Newborn babies often appear to have a yellowish tinge to their skin. This is called jaundice.

Jaundice occurs when a chemical called bilirubin builds up in the baby's blood and tissues. In most babies jaundice is a normal event and is not serious. It nearly always disappears within a few days, without the need for any treatment.

Why is jaundice common in newborn babies?

Bilirubin is a yellow-red pigment that is released when the body's red blood cells are broken down, a normal process that happens in all of us. It is normal to find small amounts of bilirubin in everyone's blood and a newborn baby's blood usually has more. Bilirubin is removed from the blood by the liver.

Most babies will develop some jaundice in the first few days of life because:

- While you are pregnant, your baby's bilirubin is removed by the placenta and by your liver. After the birth, your baby's liver has to take over the job of removing the bilirubin and this can take a little while
- Newborn babies have extra red blood cells that are broken down after birth, so more bilirubin is produced.

How do I know if my baby is jaundiced?

If your baby is jaundiced their skin will appear to be yellow. You will typically notice it three to five days after birth. It is best seen in good daylight. Jaundice can usually be seen in the face, then as the bilirubin levels in the blood increase it becomes visible on the chest, abdomen, arms and legs. Jaundice can be harder to see in babies with darker skin.

Is jaundice harmful to my baby?

Most jaundice is mild and will not harm your baby. It will usually disappear as their liver matures towards the end of the first week of life. This is called **physiological jaundice**.

Sometimes the bilirubin level is high enough to need treatment, as very high bilirubin levels can affect the brain and in rare, extreme cases can cause brain damage. This is not the usual case for jaundice. Babies who develop very high levels of jaundice have an underlying problem that causes the bilirubin levels to get so high. This is called **pathological jaundice**.

Pathological jaundice is why both health care workers and families need to check jaundice. It is always important to watch the baby and monitor the level of bilirubin in the blood and if necessary, treat the jaundice promptly.

How will I know if my baby's jaundice level is very high?

All babies born at the Women's have their bilirubin level checked with a skin sensor after 48 hours of age, at the same time as their routine heel prick for the Newborn Screening Test (NST), and at any other time there is a concern about jaundice. If this skin test suggests a high bilirubin level, then a heel prick blood test is required. This gives a more exact level of bilirubin in the blood.

Most babies with jaundice will not need any treatment. However, once the bilirubin on the blood test reaches a certain level, treatment with blue lights (phototherapy) will be recommended.

The bilirubin level at which treatment is recommended is still much lower than the level which could harm your baby.

When should I worry about my baby's jaundice?

Your midwife will monitor your baby for jaundice while you are both in hospital. After discharge from hospital your baby will be checked by visiting midwife, nurse or your independent midwife. Your local Maternal and Child Health nurse and family doctor will also provide you with support and observe your baby.

Your baby's jaundice needs to be checked by a doctor at the hospital if they:

- look yellow and are less than 48 hours of age (take your baby immediately to the Emergency Department at the hospital)
- are rapidly becoming more yellow
- are yellow on the tummy, arms or legs
- are too sleepy to feed
- are feeding poorly
- have fewer wet or dirty nappies
- have a combination of the above, or if your baby seems unwell.

In hospital, the doctor will ask you questions about your baby's feeding, sleepiness and about the number of wet and dirty nappies. Your baby will be weighed, examined and a decision will be made about the need to measure and treat the bilirubin level, and whether any other tests are needed.

How is jaundice treated?

If needed, jaundice is treated by exposing the baby's skin to blue light. This is called phototherapy. The blue light helps to break down the bilirubin in the skin until the baby's liver takes over. During phototherapy your baby will be swaddled in a flexible blue-light wrap, wearing only a nappy and with a blanket over the top of the blue light if needed. Your baby can be held and fed as normal during phototherapy.

The blue-light wrap only needs to be taken off during nappy changes and bath time. Phototherapy is very safe, but can cause your baby to have a mild skin rash or loose bowel movements. The treatment is usually only needed for 2-3 days. During phototherapy your baby will need a blood test every day.

Babies with very high jaundice levels are sometimes admitted to the Newborn Intensive Care unit for more intense phototherapy. In severe cases of *pathological jaundice* the baby may need to have new blood transfused and the old blood removed, this is called an exchange transfusion. This is rarely needed and we would give you full information about this procedure if your baby requires it.