

Home phototherapy service

Information for parents and carers

You have been given this factsheet because your baby has neonatal jaundice and needs a treatment called phototherapy. This factsheet explains how your baby can receive phototherapy at home. If you have any questions after reading this factsheet, please get in touch with us using the contact details on page 4 or ask a member of your baby's healthcare team.

What is jaundice?

Neonatal jaundice is a common condition in newborn babies that causes a yellowing of the skin and the whites of the eyes.

When a baby is born, they have a high number of red blood cells in their blood. These red blood cells carry oxygen around the body and are broken down and replaced frequently. Bilirubin is a yellow substance which is produced when red blood cells are broken down. It is normally processed by the liver and removed from a baby's body through their stools (poo).

Neonatal jaundice is a symptom of hyperbilirubinemia (a condition in which there is a build-up of bilirubin in the blood). For newborn babies (particularly those born prematurely), this usually occurs because their liver isn't fully developed and is less effective at removing the bilirubin from their blood.

High levels of bilirubin can be harmful if not treated. Your baby's bilirubin level is high enough to need phototherapy treatment.

What is phototherapy treatment?

Phototherapy involves placing your baby under a special blue light which changes the bilirubin in their blood into a form that their liver can break down more easily.

Phototherapy is usually given on Burley ward or on the transitional care unit on F level at Princess Anne Hospital.

However, in some circumstances, phototherapy can be given at home, using a special device called a Bilicocoon that surrounds your baby.

Who is home phototherapy treatment suitable for?

To be considered for home phototherapy treatment, your baby must:

- have been born after 35 weeks of pregnancy
- have weighed more than 2.5kg at birth (babies weighing between 2kg and 2.5kg may be considered following individual assessment)
- be more than 24 hours old
- be feeding well, passing urine and opening their bowels (pooing) normally
- not need any other special care
- have been assessed as ready to go home from hospital

You will also need to:

- live within the SO postcode area
- live within a 30 minute drive of the hospital
- have access to transport should you need to return to hospital at any point.

If your baby meets the criteria listed above and you are happy for them to receive their treatment at home, you will be shown how to use the phototherapy equipment and given the opportunity to ask any questions you may have before you go home.

What will my baby's home phototherapy involve?

Your baby's treatment will be given using a Bilicocoon device, which shines a blue light on your baby's skin and helps to break down the bilirubin. It is designed to allow you to hold, feed and comfort your baby without the treatment having to stop.

To be effective, phototherapy should be applied constantly, 24 hours a day. You can give your baby short breaks (up to 30 minutes at a time) for nappy changing and baths. It's important that as much of the baby's skin is in contact with the light as possible, so they will be dressed in just a nappy during their treatment.

Phototherapy cannot be given in a car, so during your baby's treatment you will need to limit car travel to essential journeys only (for example appointments at the hospital, if required).



Photograph showing baby in a Bilicocoon device in a cot.

How will the jaundice be monitored?

During your baby's treatment, our neonatal home team will visit you at home every day and complete blood tests to check your baby's bilirubin level. The blood tests are done by taking a small sample of blood from your baby's heel (heel prick) and testing it using a Bilistick device which provides an instant result. Your neonatal home team may also assess your baby's feeding and offer additional support and advice if appropriate, as frequent and effective feeding will help your baby's liver remove the bilirubin from their bloodstream.

The length of time jaundice in babies lasts can vary. Usually, bilirubin levels rise in the first few days after birth, then decrease over the next week or two.

How long will treatment be required for?

- Your baby's bilirubin level will be plotted on a treatment threshold graph according to their age.
- We will continue this treatment until your baby's bilirubin level falls to a safe level (below the treatment threshold line). The length of time this takes varies from baby to baby. A member of the neonatal home team will discuss this with you.
- If your baby's bilirubin levels continue to rise and do not respond to the phototherapy, we may need to consider readmitting them to hospital for assessment and a more intensive course of phototherapy. We will discuss this with you if necessary.

We will let you know when phototherapy can be stopped. We will then need to take a further blood test to make sure the level is not rising again.

If the levels are rising then further phototherapy treatment will be needed.

How to monitor your baby at home during their treatment

Temperature

Babies can get too hot or cold during phototherapy. The ideal body temperature for your baby is between 36.5 and 37.3°C. You can check this with a thermometer. If you don't have a thermometer you can check your baby's temperature by feeling their chest or neck. We can explain how to do this before you go home.

Please adjust your baby's blankets on top of the Bilicocoon to try and keep their temperature within the range above.

Loose stools (poo)

Babies can sometimes develop loose stools (poo) whilst receiving phototherapy. If this happens, please let the neonatal home team know.

Feeding and wet nappies

During the treatment, monitor your baby to ensure that they are feeding well and having 6 or more wet nappies a day. If they are not, contact the neonatal home team for advice.

Skin care advice

- Do not use any creams, lotions, or oils on your baby's skin whilst they are receiving phototherapy as these can cause your baby's skin to burn.
- Phototherapy can cause a mild skin rash. If you notice a rash or have any concerns about your baby's skin, please contact the neonatal home team.

Eye protection

- There is some evidence to suggest that phototherapy could be damaging to baby's eyes. For this reason, your baby will need to wear an eye mask while receiving phototherapy treatment. You will be shown how to put the mask on your baby before you go home.

Are there any alternatives to home phototherapy treatment?

If your newborn baby has jaundice that needs treatment, they will need to have phototherapy. If you would prefer your baby to receive their treatment in hospital instead of at home, please discuss this with a member of the team looking after your baby. They will be happy to answer any questions you may have.

Who do I contact if I need help?

If you have any questions or concerns, please contact our team using the details below. We will be happy to help you.

Neonatal home team

Telephone: **07766 994816** (Monday to Saturday, 7.30am to 4.30pm)

Out of hours

Transitional care unit Telephone: **07342 075794**

Useful links

www.childliverdisease.org/liver-information/baby-jaundice

www.nhs.uk/conditions/jaundice-newborn

www.nhs.uk/conditions/jaundice-newborn/complications

www.nhs.uk/conditions/rhesus-disease

www.uhs.nhs.uk/Media/UHS-website-2019/Patientinformation/Neonatal/Neonatal-jaundice-3680-PIL.pdf

www.uhs.nhs.uk/Media/UHS-website-2019/Patientinformation/Pregnancyandbirth/Checking-your-baby-is-well-1165-PIL.pdf

www.uhs.nhs.uk/Media/UHS-website-2019/Patientinformation/Pregnancyandbirth/Signs-that-your-baby-may-be-unwell-587-PIL.pdf

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