PHOTOTHERAPY AT HOME



Phototherapy is an easy and safe treatment used for babies with jaundice. It is a 'blue light' therapy that is painless and won't harm your baby. It can be done easily from home using a 'Biliblanket' or a blue light unit. This fact sheet explains 'phototherapy at home'.

How is jaundice treated?

Jaundice can be treated in different ways depending on a few factors, such as gestation (number of weeks at birth), age since birth, and severity of jaundice.

Along with extra feeds and fluids, jaundice can be treated with phototherapy ('blue light' therapy). This is an easy and safe treatment that is painless and won't harm your baby. The specific light helps to break down the bilirubin in the skin, into a form that your baby can get rid of more easily. Phototherapy can be given via a blue light unit within a blanket system called a 'Biliblanket' or a blue light unit that is placed over an incubator.

Both methods may be used together and will depend on the needs of your baby. Some babies with higher levels will require treatment in the hospital setting in an incubator while others may receive this treatment at home using a blanket system.

Phototherapy at home

Some babies who require treatment for jaundice may still be waiting for discharge from the hospital after birth whilst others may be at home already. Either way, if your baby is suitable for phototherapy at home this may be an option for you. If phototherapy in the home is an option for you, you will be provided with the relevant equipment and education. Mercy@home staff will follow up with you and support you throughout this process.

Who can have phototherapy at home?

Mercy Hospital for Women follows specific eligibility criteria to ensure it's safe for your baby to have treatment at home. Your healthcare team will discuss with you if this is an option for your baby and your family's needs.

What are the equipment and training requirements?

MHW will provide you with the equipment and training needed so your baby can have phototherapy at home. This will happen either:

- Before you are discharged from the post-natal ward after having your baby
- If you present to our Emergency Department and your baby has jaundice
- We may ask you to attend our Emergency Department to collect the equipment and have the training.

The equipment will be collected by the Mercy@Home team when phototherapy treatment has been completed.



You will receive the following equipment:

BiliSoft Phototherapy Unit including blanket



RCD power safety unit



Disposable covers for BiliSoft blanket



Thermometer



Disposable protective eye covers



Clinell – Alcohol free cleaning wipes



You'll also receive:

- 1. Patient Information Jaundice in newborn babies
- 2. Patient Information Guide for babies requiring extra/scheduled feeds
- 3. Patient Information Safe Sleeping Recommendations
- 4. You'll also be asked to complete a Phototherapy at Home Hire Agreement form

How to use the equipment

You will be provided with education on how to use the equipment to make sure you feel comfortable with using and managing the treatment at home. You can also refer to the equipment set up video available on The Royal Women's Hospital website.

- **1.** Unpack all the equipment from the container. Start by placing the power box and the BiliSoft light-box on a firm surface. It needs to be close enough for the black cable to reach your baby's cot.
- 2. Slide the light-pad right into the disposable BiliSoft pad cover. Make sure that the light-pad faces upwards. This is the side of the pad that goes against the mattress and this is the side of the pad that should lie along your baby's back. The wrap-around closure tabs need to be at the back of the light-panel.
- **3.** Plug the BiliSoft light-pad into the BiliSoft light-box by gently pushing the black cable into the connection. You will feel it click into place.
- **4.** Dress your baby in just their nappy so that plenty of light can get to baby's bare skin. Connect the power plug of the biliblanket power source to the safety box. Plug the power adapter safety box into a powerpoint on the wall and switch it on. Switch on the biliblanket power source. The blue light should now be working.
- 5. Check your babies temperature prior to starting the treatment. You'll need to record your baby's temperature and activity using the chart provided in the <u>Patient Information Guide for babies requiring extra/scheduled feeds</u>. In the comment section of this chart you can record the start times of treatment, feed times and amount, temperature, nappy changes, output and baby baby behaviours.
- **6.** Place your baby on the light-panel. Make sure your baby's head is above the light-pane. Wrap the straps of the BiliSoft pad cover around your baby's stomach and chest. They should be tight enough to hold the light-panel in position comfortably.
 - You can place other blankets over the top of, or around your baby if their temperature remains within range. Just ensure your baby's head remains out of the Bilisoft and any other blankets.
- **7.** Your baby's temperature must be checked regularly so they don't become too hot or too cold. Please check their temperature:
 - Before placing your baby in the Biliblanket
 - Every 3- 4 hours or before each feed while on the Biliblanket.

Your baby's temperature should be between 36.5 – 37.5 degress Celsius.

- **8.** The Mercy@Home team will schedule visits with you to check your baby's weight, feeding and biliruben level. They will take blood tests to monitor your babies jaundice. You will be informed of the result and the appropriate action needed.
 - When the biliruben level is low enough, the phototherapy treatment can stop. The Mercy@Home team may schedule another visit after the treatment has stopped to ensure the Jaundice levels haven't increased again. They'll keep you informed.

Key Points to remember:

Your baby should only wear a nappy under the BiliSoft blanket – so that the amount of light that gets to your baby's skin is maximised.

Phototherapy should only be interrupted briefly for temperature checks, nappy changes and feeds if required, but for no more than 30 minutes daily. For the rest of the time you can care for your baby at home as normal – hold, feed and settle your baby while they wear the phototherapy Biliblanket.

For safe sleeping, remember to follow safe sleep guidelines, and always place your baby on their back, with their head uncovered, at the foot end of the cot.

Change the disposable cover if it becomes soiled.

The power unit doesn't run on batteries, so you need to have it plugged in to household power during treatment. And you need to be home for the whole treatment time.

Siblings and other children may be interested by this equipment and accidentally turn on/off buttons so please ensure there is adult supervision when using this therapy.

Possible side effects

Babies can become warm during phototherapy so their temperature must be monitored throughout the treatment.

Phototherapy can cause loose stools or a skin rash. These are not serious and will not harm the baby.

Babies must have enough feeds while having phototherapy to prevent dehydration and to enable the bilirubin to be removed in urine and stools.

Important safety information

Although this therapy is low risk, there is a possibility that if your baby's eyes are exposed to the blue light for too long it can cause damage to the retina (tissue that lines the inside of the eye). Please ensure your baby is swaddled with a blanket over the Biliblanket to prevent ongoing light exposure to the eyes. Please use the protective eye covers if or when the baby is not swaddled.

The light box is not heavy and can be dragged or knocked over easily. As your baby will be securely wrapped in the Biliblanket, if the light box is knocked your baby could fall. Please position the box carefully on a flat surface, out of the way of trip hazards, and monitor closely to ensure this does not happen.

Do not cover the vents on the side and back of the light box while in use or it may overheat. Avoid looking at the light connection port directly when the device is switched on and the pad is not connected. The light is very bright and is uncomfortable to look at directly.

After use, the connectors of the light box and bag can be hot. Please take care when handling.

Handle the fibre optic cable with care, avoid bends, twists or folds that may cause damage.

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Safe Sleeping Guidelines

It is important to follow safe sleeping principles when caring for your baby while on the Biliblanket at home.

Further information on safe wrapping and safe sleeping guidelines will be provided below under the section 'Other Related Resources' and can be found online at Red Nose Australia.

When should you seek immediate medical advice?

Always seek immediate medical advice if:

- your baby's temperature is outside normal ranges (36.5 37.5) for more than 2 hours
- your baby is hard to wake or you are having trouble feeding because your baby is too sleepy
- your baby is irritable and difficult to calm
- your baby is passing pale chalky bowel actions or dark urine
- you have other concerns about your baby.

The Mercy@Home team is contactable on:

- Business Hours: (03) 8458 4466 - After Hours: (03) 8458 4636.

The MHW Emergency Department is open 24 hours, and you may present here if you have any concerns. In case of a medical emergency please call an Ambulance on 000.

Other Related Resources

Patient Information – Guide for babies requiring extra/scheduled feeds

Red Nose Six Safe Sleep Recommendations | Red Nose Australia

Is it Safe to Wrap or Swaddle My Baby? | Red Nose Australia



Contact us

If you have any questions or need further advice, please call the Mercy@Home department:

- Monday to Friday
- 8:00am to 4:30pm

Ph: (03) 8458 4466

In the event of an emergency, please dial **000** for an ambulance or go to your nearest Mercy Health or other hospital emergency department.