



Table of Contents

Introduction	2
Some Facts About the PEP Bed	2
Getting Started	3
Caring for Your Baby	4
Keeping the Daily Record Sheet	5
More About Phototherapy	6
When Phototherapy Is Completed	7

Emergency Numbers

Clinician _____

Hospital _____

Instructor _____

Equipment Provider _____

Introduction

Your baby has developed jaundice — a common disorder of newborns wherein a chemical called bilirubin builds up in the baby's blood and causes a yellow hue. Your clinician has prescribed phototherapy to treat this condition. Used for many years as the safest and most effective treatment, phototherapy consists simply of shining blue light onto the baby. This light breaks down the excess bilirubin in the skin and will usually lower the baby's bilirubin to a safe level within 1-2 days. On rare occasion, jaundice can increase to a dangerous level that may cause brain damage, so close monitoring and treatment, though relatively simple, is important.

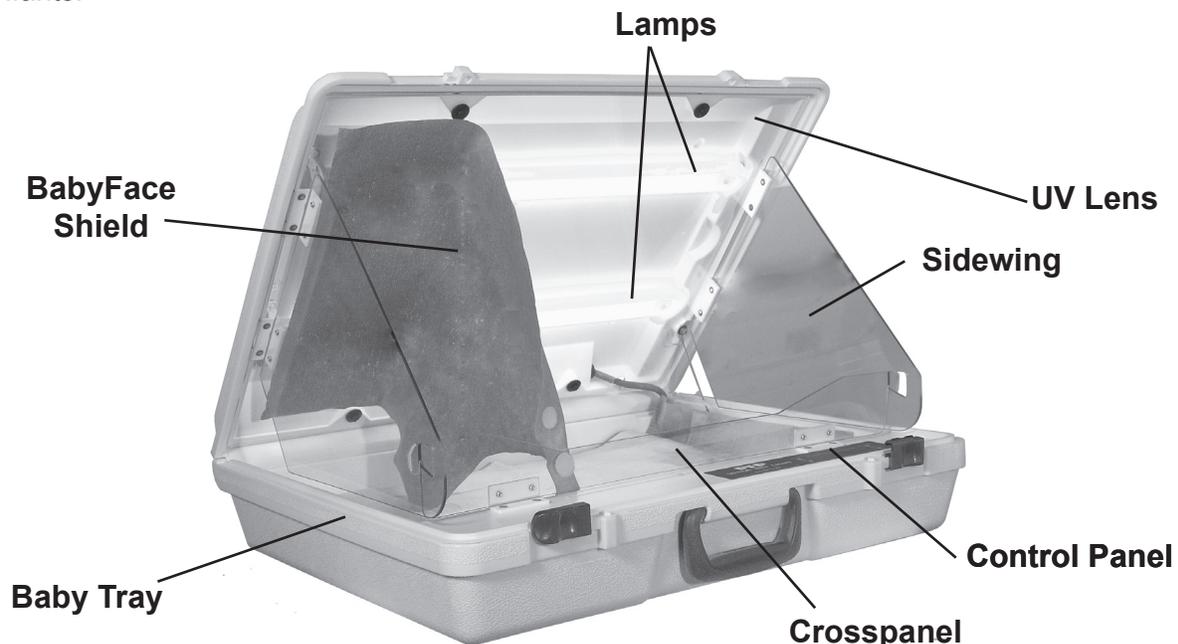
In recent years, phototherapy has moved increasingly from the hospital setting into the home. There are good reasons for this trend:

1. The availability of portable PEP Bed devices which are safe and effective.
2. The cost of treatment is much less at home.
3. Bonding between parents and baby is not interrupted.
4. Convenient feeding schedules can be maintained.

This instruction booklet should help you become comfortable in caring for your baby during phototherapy.

Some Facts About The PEP Bed

1. The PEP Bed is of modest weight, but should not be lifted by new mothers.
2. The PEP Bed uses special blue and white fluorescent lamps. The blue portion provides most of the desired wavelength of light; the white portion allows for accurate assessments of the baby's color. Adequate treatment is given with just one lamp set, but both lamp sets are preferred. If a light is not working, notify your instructor or equipment provider. **Never attempt to change lamps at home.**
3. The clear plastic UV Lens prevents ultraviolet light from reaching baby and protects the lights. This UV Lens should not be removed.
4. PEP Beds are safer than other phototherapy units because they have a built-in temperature warning and control system. When the unit is in use, the temperature under the lights is 6° to 7° F (3.3° to 3.9° C) warmer than the room temperature. This is ideal in most circumstances.
4. This unit has not been approved for use with oxygen, infant monitors, other electrical devices or high risk infants.



Getting Started

1. Choosing a Location

Location of the unit is important. Select a location where the room temperature can be maintained between 70° F and 76° F (21° C and 24°C) for baby's comfort and safety. Choose a position that is off the floor, away from drafts, and where baby is readily visible. The PEP Bed will fit nicely in a crib, which is an excellent location. An electrical outlet must be nearby. Do not use extension cords. Your instructor may assist you in selecting the best location.

2. Setting Up

The PEP Bed sets up easily by sliding the latches to the sides and lifting the lid. Place the tethered power cord outside the unit to the right. The Sidewings drop down and are locked into place by gently pulling the front Crosspanel towards you until the ends fit through the slots in the Sidewings. Be careful not to exert too much pressure on the hinges of the Crosspanel - it should lock together easily. When the Crosspanel is released, the spring-action locks all the panels together into a safe, rigid form. Test the lid for secure fastening by gently lifting the lid to ensure the Sidewings are locked in place. **NEVER TRY TO CLOSE THE LID WHILE THE UNIT IS SET UP. NEVER PLACE HEAVY OBJECTS ON TOP OF THE UNIT.**



3. Plugging In the PEP Bed

An electrical power cord is provided. The female end plugs into the right side of the unit. The male end is a hospital-grade, grounded plug that fits into a wall outlet.

4. Becoming Familiar with the Control Panel

a. PEP Ultra BiliLight - Models 2000 & 2220 (White Case)

- On/Off switch controls the power to the PEP Bed.

Indicator Lights:

- **HIGH Room Temp** indicates the room temperature is too warm and the Baby Tray is over 98° F (36.7° C). A beeper will also sound and treatment lights will flash and eventually turn off.
- **Heater ON** indicates the Baby Tray is too cool (below 75° F/24° C) and the warming unit is on.
- **Service Soon** indicates the lamp hours are over 1800 hours, and lamp replacement is needed soon.*
- **Replace Lamps** indicates lamp hours have reached or exceeded 2000 hours and need to be replaced.*

*These indicators do NOT mean that the PEP Bed cannot be used for treatment. If you notice they are lit, PEP recommends you inform your equipment provider and continue treatment as directed.

b. PEP Home BiliLight - Model 100 (Blue or Gray Case)

- ON/OFF switch controls power to the PEP Bed. The PEP Home BiliLight is ON when the red indicator lamp next to the rocker switch is lit.
- High Room Temperature is indicated by treatment lights flashing if the Baby Tray temperature is above 98° F (36.7° C).
- **Heater ON** indicates the Baby Tray is too cool (below 75° F/24° C); the warming unit is on.

5. Preparing the Unit for Baby

- a. Place a disposable pad on the vinyl-covered mattress in the baby bed - white, absorbent side up.
- b. Install the *BabyFace Shield* as instructed (see "Caring for Your Baby").

6. Preparing Baby for the Unit

- a. Remove all baby's clothes. Mini-Diapers are recommended for maximum light exposure.

Caring For Your Baby

1. Eye Protection

It is recommended that the baby's eyes be protected from the bright light of phototherapy. You will be offered one of two protection options by your equipment provider:

- a. The *BabyFace Shield* is a fabric screen that adheres to the phototherapy unit on the left side, shielding the head and allowing your baby's eyes to be open.
- b. Standard eye patches may be used. Your clinician may have a preference. Follow your instructions carefully.

Using the *BabyFace Shield*

- a. The *BabyFace Shield* has loop fasteners in six places.
- b. First, match the four loop fasteners on the *BabyFace Shield* to the fastener dots on the UV Lens, then extend the shield across the Baby Tray and secure to the dot on the Crosspanel (as shown on page 2). Depending on your unit, use the top loop fastener on the narrow corner of the *BabyFace Shield* for an Ultra BiliLight (white case) and the bottom loop fastener for a Home BiliLight (blue case).
- c. During phototherapy, the baby's head must always be placed toward the left of the unit under the *BabyFace Shield*. Your baby is not likely to creep out from under the *BabyFace Shield*, but the infant should be carefully observed to ensure that the baby's face remains under the shield at all times. If your baby does creep out from under the *BabyFace Shield*, one or more rolled-up towels may be placed at your baby's feet or side to help hold the correct position. A baby may also creep the other direction. To ensure as much skin area as possible is exposed to the light, a rolled-up towel may be placed at the baby's head in this case.
- d. Notify your instructor or clinician if your baby will not stay under the *BabyFace Shield*.
- e. The *BabyFace Shield* will probably last the duration of your baby's therapy, but it is disposable and may be replaced if soiled.

Using Eye Patches

- a. Your clinician may prefer eye patches instead of, or in addition to the *BabyFace Shield*. Eye patches come in different styles. Carefully follow the instructions given to you.
- b. Check the position of the patches to ensure they are not covering the baby's nose or mouth.
- c. Remove the patches when baby is not under the lights.
- d. Notify your instructor or clinician if the eye patches will not stay in place.

2. Mini-Diapers

Mini-diapers may be included in your Treatment Kit and are recommended for use with the disposable pad. If your clinician prefers that no diaper be used, the disposable pad may serve in place of a diaper.



Keeping The Daily Record Sheet

It is important to record temperatures, feedings and outputs (urine and stool) regularly, as well as the baby's position (side or back). Record the hour reading (control panel on the Ultra BiliLight; hour meter on the Home BiliLight) daily to determine how much phototherapy is delivered to your baby.

1. Position of Baby

Do not place your baby on his/her stomach. Most clinicians prefer your baby to be placed on the back or side. If allowed, change your baby's position after each feeding to expose different areas of baby's body to the light. This increases the effectiveness of the phototherapy.

Remember, the baby must always be placed with the head toward the left of the unit.

2. Temperature

Because your baby is unclothed, it is important to monitor his/her temperature. Temperatures may be obtained by placing the thermometer in baby's armpit with the arm against the body for three minutes (axillary technique). Do this immediately after placing baby in the unit. Be sure to record all temperatures on the Record Sheet. After half an hour, take another axillary temperature, then again every 3 to 4 hours or before each feeding. Remember to take the temperature while the baby is lying in the PEP Bed. If your baby's temperature is less than 97° F (36.1° C) or over 100° F (37.8° C), retake the temperature in five minutes. If it is still too low or too high, call your clinician.

- a. **Low Temperature** — If the temperature in the Baby Tray is less than 75° F (24° C), your baby is at risk of becoming too cool. The warning light will come on, and a warming unit under the Baby Tray will automatically warm the baby. Phototherapy should be continued, but your baby's temperature should be checked every hour to ensure your baby is not getting too cold (hypothermic). **Attempt to increase the room temperature.**
- b. **High Temperature** — Rarely, a baby may get too hot during phototherapy, especially if the room is too warm, if the baby is very active, or over nine pounds. If the temperature of the Baby Tray is over 98° F (36.7° C), your baby is at more risk of becoming overheated (hyperthermic). As a safety feature, in this circumstance the warning light will come on and the unit's lights will flash and automatically turn off. **If this happens, remove your baby from the PEP Bed and decrease the room temperature.** Call your clinician. Check the baby's temperature hourly and do not resume treatment until your clinician tells you to do so. Remember, it is the baby's temperature, not the unit's temperature, that is most important.

Under most circumstances, the temperature of the PEP Bed will be fine for the baby. The warning lights, the automatic warming unit, and the treatment light shut-off system of the PEP Bed are unique safety features that provide protection against temperature extremes in the PEP Bed, but do not guarantee your baby's temperature will remain normal. Temperature monitoring of the baby is important.

TURN THE PEP BED OFF WHEN THE BABY IS NOT IN THE UNIT.

3. Feeding

Follow your baby's regular feeding schedule, but feed baby at least every four hours. Breast-fed jaundiced babies do better with frequent feedings (every 2-3 hours). If your baby feeds poorly for two consecutive feedings, call your clinician. Record feeding times and amounts on the Record Sheet.

4. Bowel and Urine Output

Record all bowel and urine output as your clinician will use this information to tell if your baby is getting enough fluids. Loose stools are common during phototherapy. Severe diarrhea, no bowel movements for three days, or no urine for 12 hours should prompt a call to your clinician.

More About Home Phototherapy

The more your baby is under the lights, the shorter the course of treatment, and the sooner your family can “get back to normal”. Your baby must be out of the unit for feeding, cuddling, trips to the clinician’s office and while you sleep; otherwise the baby should be under the lights as much as possible.

If your clinician recommends intermittent phototherapy or a break from phototherapy each day, clothe and cover the baby when the lights are off.

When Removing Baby

The PEP Bed should be turned OFF any time the baby is not actually receiving treatment. This is due to the following:

1. If the unit is left on while your baby is out of the unit for any reason, the hour meter will continue to run and reflect an incorrect amount of treatment time to your clinician.
2. There is no warm-up period needed with the PEP Bed because treatment begins when the lamps are turned on. However, allow the unit to reach 70° F - 75° F (21.1° C - 23.9° C) before placing the baby in the unit.

Your baby may be somewhat fussy. This is normal. If cuddling or feeding does not console your baby, you may need to continue the phototherapy and ignore the protests.

Health Visits

Arrangements will be made for you to have at least a daily visit with your clinician. The Record Sheet will be reviewed, your baby will be examined, and a bilirubin test will be performed at least daily. A final bilirubin test may be done the day after phototherapy is completed. When phototherapy is complete (usually 1-2 days), return the Record Sheet to your clinician’s office to be included in your baby’s medical record.

Cleaning the PEP Bed

If you need to clean the PEP Bed, wipe the surfaces with a moist sponge or soft cloth. Non-abrasive soap may be used. Avoid abrasive cleaners.

DO NOT IMMERSE UNIT IN ANY LIQUID OR ALLOW LIQUID TO POOL ON CONTROL PANEL.

When Phototherapy Is Completed

Once your baby has successfully completed the course of phototherapy, the PEP Bed can be returned to your equipment provider.

1. Closing the Unit

- a. Gently pull the Crosspanel toward you to disengage the ends from the Sidewings.
- b. Fold Sidewings up against the UV Lens and fold Crosspanel down into the Baby Tray.
- c. Replace the electrical cord in Baby Tray;
- d. Carefully lower the lid;
- e. Slide both latches closed (side-to-side, towards the center of the unit).

2. Returning the Unit

Follow the instructions for returning the PEP Bed given to you by your equipment provider.

DO NOT PLACE ANYTHING ON TOP OF THE PEP BED OR TREATMENT LAMPS MAY BREAK!

REMEMBER — Help is always available. If you have any trouble or questions, call your instructor or your clinician.

CONGRATULATIONS!! YOU'VE DONE IT! You've stayed close to your baby and maintained a desired feeding schedule while ensuring fast, safe treatment of jaundice. You have helped your baby over one of life's early hurdles and saved considerable expense.

For further information regarding the use of the PEP Bed, contact your equipment provider or instructor.

TREATMENT RECORD SHEET

Infant's Name _____ Birth Date _____ Birth Weight _____
 Day # 1 Date _____ Day # 2 Date _____
 Hour Meter: Beginning _____ Ending _____
 Today's Weight _____ Today's Weight _____
 Gain/Loss _____ Gain/Loss _____

Time	Under Lights		Infant Position		Armpit Temp. (F or C)	Intake Amount		Output Amount		Armpit Temp. (F or C)	Infant Position		Intake Amount		Output Amount	
	Minutes per Hr.		Back	Side (L or R)		Breast	Bottle	Urine	Stool		Back	Side (L or R)	Breast	Bottle	Urine	Stool
8 am																
9 am																
10 am																
11 am																
12 pm																
1 pm																
2 pm																
3 pm																
4 pm																
5 pm																
6 pm																
7 pm																
8 pm																
9 pm																
10 pm																
11 pm																
12 am																
1 am																
2 am																
3 am																
4 am																
5 am																
6 am																
7 am																

Next Appointment Date _____ Time _____
 Next Appointment Date _____ Time _____

TREATMENT RECORD SHEET

Infant's Name _____ Birth Date _____ Birth Weight _____

Day # 3 Date _____ Day # 4 Date _____
 Hour Meter: Beginning _____ Ending _____
 Today's Weight _____ Today's Weight _____
 Gain/Loss _____ Gain/Loss _____

Time	Under Lights		Infant Position		Armpit Temp. (F or C)	Intake Amount		Output Amount		Under Lights (Min/Hr)	Infant Position		Armpit Temp. (F or C)	Intake Amount		Output Amount		
	Minutes per Hr.		Back	Side (L or R)		Breast	Bottle	Urine	Stool		Back	Side (L or R)		Breast	Bottle	Urine	Stool	
8 am																		
9 am																		
10 am																		
11 am																		
12 pm																		
1 pm																		
2 pm																		
3 pm																		
4 pm																		
5 pm																		
6 pm																		
7 pm																		
8 pm																		
9 pm																		
10 pm																		
11 pm																		
12 am																		
1 am																		
2 am																		
3 am																		
4 am																		
5 am																		
6 am																		
7 am																		

Next Appointment Date _____ Time _____ Next Appointment Date _____ Time _____

Home Phototherapy Informed Consent Agreement

1. I understand that _____ has been diagnosed with newborn jaundice and that phototherapy has been prescribed.
2. I have been instructed in the potential benefits and risks of home phototherapy, and I desire to proceed with this treatment by using rental PEP Bed equipment.
3. I have received, read and will follow the instructions provided in this *Parents' Guide to the PEP Bed* or other instructional materials provided by my baby's clinician or the organization providing home phototherapy.
4. I am aware of the risks of:
 - a. Excessively high bilirubin levels.
 - b. Failure of the bilirubin to respond adequately to treatment.
 - c. Possible eye damage if the eyes are not shielded from bright lights.
 - d. Possible too high or too low temperature of baby.
 - e. Possible fluid/nutritional imbalance of baby.
5. I agree to minimize these risks by carefully following the instructions to:
 - a. Have health visits and bilirubin checks for baby at least daily.
 - b. Use baby eye shielding at all times during treatment.
 - c. Monitor baby's temperature as per instructions:
_____ I have an appropriate thermometer; and
_____ I know how to take armpit temperatures.
 - d. Record baby's intake and output.
6. I understand that home treatment is a reasonable alternative to hospital treatment, that it costs less and allows better family bonding and easier feeding schedules, but that it also makes close medical supervision more difficult.
7. I understand that the PEP Bed unit is rented, and the disposable supplies are purchased. I agree to:
 - a. Return the phototherapy unit immediately if it does not properly function.
 - b. Maintain the unit and return it in as good a condition as when received.
 - c. Be liable for the cost of any damage to the phototherapy device while in my possession.
 - d. Return the unit promptly after discontinuation of treatment.
 - e. Promptly pay the rental charges and any damages incurred.

Signature of Parent/Guardian

Date

Home Phototherapy Informed Consent Agreement

1. I understand that _____ has been diagnosed with newborn jaundice and that phototherapy has been prescribed.
2. I have been instructed in the potential benefits and risks of home phototherapy, and I desire to proceed with this treatment by using rental PEP Bed equipment.
3. I have received, read and will follow the instructions provided in this *Parents' Guide to the PEP Bed* or other instructional materials provided by my baby's clinician or the organization providing home phototherapy.
4. I am aware of the risks of:
 - a. Excessively high bilirubin levels.
 - b. Failure of the bilirubin to respond adequately to treatment.
 - c. Possible eye damage if the eyes are not shielded from bright lights.
 - d. Possible too high or too low temperature of baby.
 - e. Possible fluid/nutritional imbalance of baby.
5. I agree to minimize these risks by carefully following the instructions to:
 - a. Have health visits and bilirubin checks for baby at least daily.
 - b. Use baby eye shielding at all times during treatment.
 - c. Monitor baby's temperature as per instructions:
_____ I have an appropriate thermometer; and
_____ I know how to take armpit temperatures.
 - d. Record baby's intake and output.
6. I understand that home treatment is a reasonable alternative to hospital treatment, that it costs less and allows better family bonding and easier feeding schedules, but that it also makes close medical supervision more difficult.
7. I understand that the PEP Bed unit is rented, and the disposable supplies are purchased. I agree to:
 - a. Return the phototherapy unit immediately if it does not properly function.
 - b. Maintain the unit and return it in as good a condition as when received.
 - c. Be liable for the cost of any damage to the phototherapy device while in my possession.
 - d. Return the unit promptly after discontinuation of treatment.
 - e. Promptly pay the rental charges and any damages incurred.

Signature of Parent/Guardian

Date

Instructor's Checklist

Patient's Name _____

_____ Baby meets the protocol criteria for entry.

_____ Home phototherapy reviewed with parents.

_____ Parents are able and willing to oversee phototherapy.

_____ Informed Consent Form signed.

_____ Parents' Guide reviewed:

_____ Parents agree to thoroughly read.

_____ Site selection reviewed.

_____ Set-up and operation of the unit explained.

_____ Eye protection explained. Parents appear to understand.

_____ *BabyFace Shield* _____ Eye patches will be used.

_____ Temperature monitoring explained. Parents appear to understand.

_____ Parents have an adequate thermometer and understand its use.

_____ Axillary (armpit) temperatures demonstrated.

_____ Warning/control system explained.

_____ Record keeping reviewed.

_____ Follow-up visits explained.

Notes/Special concerns: _____

Date _____ Instructor _____