

Equipment Needed – St Paul

- Infant Warmer (Drager 7830 Infant warmer)
- Drager Bili Lights
- Bili Blanket (optional if ordered)
- Bili Meter (Ohmeda Bili meter)
- Infant Warmer Probe and probe cover
- Infant eye protectors
- UVEX Orange Safety Goggles (optional for caregivers and parents)

Obtaining Equipment- St Paul

- Warmer and single bank of lights are located in the 6th floor storage area.
- Bili blanket needs to be ordered from MESA.
- Infant eye protection, warmer probe, blanket cover, and infant probe cover can be found in the unit supply room.
- UVEX Orange Safety goggles are found in the Bili Meter box.
- Bili meter box is located in the 6th floor treatment room in the cupboard.

Phototherapy Light Setup

- Typically need only 1 bank of lights and a bili blanket
- Position unit flat or at an angle
- Adjust the height of the Drager Lights by loosening the hand screw near the middle of the pole.
- **Minimum distance between bottom edge of phototherapy light and the patient's abdomen is 1 foot or 30cm.**
- Blue phototherapy lights need to be on, white lights can be on as well but do not need to be running for therapy to work.
- Full phototherapy power is reached after approximately 1 minute.
- **Light reading should be a minimum of 30uW/cm²/nm.**
- The greater the amount of infant skin exposed to the light, the greater the efficacy of the phototherapy

Bili Blanket Setup

- The blanket needs to have a protective sleeve covering the pad while in use.
- Place infant's back or chest directly on **white side** of the pad with tip of pad at baby's shoulders and cord at baby's feet.
- There should be nothing between the infant's skin and the pad except for a diaper and the disposable cover.
- The intensity level (if applicable) should be set on maximum.
- To perform a blanket check, allow blanket to warm for 15 minutes. Make certain maximum light output on the blanket has been set. Place the meter at the approximate center of the blanket. Measure and record. **The measurement should be = or greater than 30uw/cm²/nm.**

Ohmeda Bili Meter

- Set the “Hold/Run” switch to the “Run” (OUT) position **(with cap still on!)**
- Turn meter on: zero should be displayed.
- Remove receptor cap over receptor dome.
- Place the dome of the meter pointing to and **parallel with the center of the light source at the level of the infant’s skin.**
- Press the “Hold” (IN) button to display and freeze the current irradiance level.
- Read result on meter.
- Place receptor cap back over receptor dome; turn meter off

Removing Infant to Feed

- Turn phototherapy off
- Remove eye patches
- **Turn warmer off to avoid nuisance alarms**
- Unplug skin probe from the warmer

Returning Infant to Phototherapy

- Return infant to warmer
- Plug in skin probe
- **Restart warmer – skin mode in St Paul or Servo mode in Minneapolis**
- Replace eye patches
- Restart phototherapy

** Remember that no lotions or creams should be applied to the baby while using Phototherapy**

Common Alarms and Troubleshooting

- **Warmer will alarm within 9-13 minutes of operation in the manual mode.** (A one second alert every 30 seconds, and after 14-20 minutes a continuous alarm and the heater turned off. Activating the silence/reset switch will restart this process.)
- Warmer will alarm whenever the infant skin temperature reading is +/- 1 degree different than the set temperature reading.

Common Alarms and Troubleshooting

- When infant is in the warmer the skin temperature setting (STP), or ServoMode (MPLS) must be used.
- Initial set point should be started at 36.5 degrees, but will usually need to be adjusted to keep set and infant temp reading within +/- 1 degree of each other. A common range is 35-36 degrees.
- Infant may need a very low set point to maintain a stable temp. Adjust according to axillary temp readings.
- Check axillary temperature frequently until stable.

Common Alarms and Troubleshooting

- Tips for the placement of temperature probes:
- Attach to clean, dry skin on a flat, fleshy area away from any bony prominence.
- Must be covered with a reflective probe cover.
- Location of the skin probe must be in direct line with the overhead-warming unit.
- Covering the probe will cause the infant's skin temperature to read inaccurately and trigger alarms. (Alarms can occur even if the infant places their own arm over the probe.)

Documentation

The screenshot displays a medical software interface for patient 'Learn, Ce3200s1'. The patient's DOB is 06/21/2003, age is 7 years, and sex is Female. The interface includes a menu bar with options like 'Task', 'Edit', 'View', 'Patient', 'Chart', 'Links', 'Options', 'Documentation', 'Orders', and 'Help'. A toolbar contains various icons for patient management. The patient information section shows 'Precautions: Not Specified', 'MRN: 2345550-emrn', 'Acct#: 1000987014', and 'Anticipated DC: Serv:'. A red banner indicates 'Allergies Not Recorded'. The main window is titled 'I View/I&O' and shows a 'Last 12 Hours' documentation grid for 'Newborn Phototherapy'. The grid has columns for times 13:30, 13:00, 12:30, 12:00, 11:30, 11:00, 10:30, 10:00, and 9:30. The rows include 'Single bank', 'Fiber-Optic Blanket', 'Eye Mask On', 'Genitalia Covered', 'Bili Meter-blanket', 'Bili Meter-bank numb...', and 'Bili Meter-bank numb...'. The 'Bili Meter-bank numb...' rows show values of 26 and 28. A 'Comments-Newborn Phot...' row is also present. The interface also shows a sidebar with 'Intake/Output', 'Med/Surg Core Assessment', and 'Specialized Assessment' sections. The taskbar at the bottom shows the Windows start button and several open applications, including 'Novell Grou...', 'Microsoft Po...', 'CernerWork...', 'PowerChart ...', and 'Learn, Ce32...'. The system clock shows '26 October 2010 13:51'.

	13:30	13:00	12:30	12:00	11:30	11:00	10:30	10:00	9:30
Newborn Phototherapy									
Phototherapy									
Fiber-Optic Blanket	Yes								
Eye Mask On	Yes								
Genitalia Covered	Yes								
Bili Meter-blanket	nM 26								
Bili Meter-bank numb...	nM 28								
Bili Meter-bank numb...	nM								
Comments-Newborn Phot...									

Phototherapy documentation needs to be done. Check intensity of lights (blanket and bank) **upon initiation and every 8 hours using the bilimeter**. A Calibration check (Cal check) must be performed and documented daily in St Paul, enter under comment section.