



FIG 8-17 **A**, An infant receiving phototherapy; note the nested boundaries for comfort and eye protection. **B**, A newborn laying on a BiliBlanket, which may be used with overhead lights to provide intensive phototherapy. (Courtesy E. Jacobs, Texas Children's Hospital, Houston, TX.)

Studies indicate that blue fluorescent light is more effective than white fluorescent in reducing bilirubin levels. However, because blue light alters the infant's coloration, the normal light of fluorescent bulbs in the spectrum of 420 to 460 nm is often preferred so the infant's skin can be better observed for color (jaundice, pallor, cyanosis) or other conditions. Increasing irradiance to the 430 to 490 nm band provides best results. For phototherapy to be effective, the infant's skin must be fully exposed to an adequate amount of the light source. A diaper and boundary materials for postural support may be left in place; periodically turning the neonate under phototherapy has not been shown to accelerate bilirubin clearance ([Stokowski, 2011](#)). When serum bilirubin levels are rapidly increasing or approximating critical levels, intensive phototherapy is recommended. Intensive phototherapy with a higher irradiance is