Head Shape and Positioning
When your baby is premature

Your baby is spending a lot of time lying in a crib. This means that your baby’s skull is always weight bearing (holding the weight of their head).

When babies are very young, they may not be strong enough to hold their head centered, or to change their head position. Over time, if babies keep their head in one position a lot, the skull can flatten in one area or form in an odd shape.

Babies in the NICU may be placed on their side or their stomach as part of their care. If babies can handle being in different positions, we may change their position often. We do this to vary what part of the skull is doing the weight bearing, which helps keep their head from changing shape.

Side-lying and Scaphocephaly
When a preterm baby lies with their head turned to the side for long periods, it can flatten the skull on the sides. This is called scaphocephaly.

If your baby’s head looks like the top images below, help your baby take weight through the back of the head. To do this:

- Place your baby lying on their back, so your baby is looking up toward the ceiling during sleep.
- Avoid letting your baby’s head turn to either side.

Head Rotation and Plagiocephaly
When a preterm baby tilts their head to one side a lot, their head can start to get flat on that side. This is called plagiocephaly.

If your baby’s head looks like the bottom images on this page, help your baby avoid sleeping with their head tilted toward that side. To do this:

Scaphocephaly can occur when babies lie too much with their head turned to the side.

Plagiocephaly can occur when a baby’s head tends to stay tilted to one side.
- Help your baby keep their head centered.
- Help your baby’s head tilt to the other side more often.

For example, in the image for plagiocephaly on page 1, the baby’s head is flat on the right side. This baby needs help staying off their right side and practice tilting to their LEFT side.

**Back-lying: Brachycephaly**

When preterm babies spend most of their time lying on their back, the back of their head may flatten. This is called *brachycephaly*.

If your baby’s head looks like the image below, please help your baby take weight through the sides of their head. To do this:

- Help your baby sleep on their side. Alternate right and left sides to even out the pressure. This will help reshape their head.

![](image)

*Brachycephaly can occur when babies lie on their back a lot.*

**Positioning Your Baby**

**In the NICU**

While your baby is in the NICU, monitors and nurses watch over your baby 24 hours a day. Because we keep track of your baby’s vital signs at all times, we may position your baby in different ways to help avoid head shape problems.

**At Home**

Because you do not have monitors and 24-hour nurses at home:

- **It is NOT SAFE to place your baby on their side or tummy to sleep.** These positions can increase the risk of health problems.

- **The only safe sleeping position for your baby is LYING ON THEIR BACK.**

If you have concerns about your baby’s head shape when you are getting ready to take your baby home, please talk with a motor therapist about what you can do at home.