**47% of babies studied have flat spots on heads**

Michelle Healy, USA TODAY *12:06 a.m. EDT July 8, 2013*

***Placing healthy babies on their backs to sleep reduces the risk of SIDS and takes precedent over concerns about positional plagiocephaly, a flattened head condition that generally can be reversed.***



A new study links flat spots on infants' heads to sleep positioning. (Photo: Tatjana Alvegard, Getty Images)

**Story Highlights**

* Flat spots on babies' heads result from sleep and caregiving positions
* They can be prevented by changing the side of the head the infant puts pressure on
* Babies should still be placed on their backs to sleep, to reduce risk of SIDS

An education campaign launched in 1992 to have healthy babies sleep on their backs is credited with a 50% decrease in the infant mortality rate in the U.S. from Sudden Infant Death Syndrome. But along with the decline has come greater awareness of a condition called positional plagiocephaly, in which an infant's head is flattened or misshapen, from too much time in the back position in the first months of life.

Other studies have put the rate of positional plagiocephaly (pronounced pley-jee-uh-SEF-uh-lee) anywhere from 3% to 61%. A new, large sample of 440 healthy infants finds 47% of babies ages 7 to 12 weeks had the condition.

By this age, plagiocephaly resulting from the use of forceps or other instruments during delivery typically would have resolved, says researcher Aliyah Mawji,an assistant professor of nursing at Mount Royal University in Calgary, Alberta, Canada.

Ongoing flat spots on the back or one side of an infant's head "are signs that the baby has not been given enough opportunities for repositioning" to prevent pressure on the flat areas and gradually correct the head shape, says Mawji, lead author of the study in the August issue of the journal *Pediatrics*, published online today.

In 1999, Canadian health officials also began recommending that all healthy infants be placed on their backs to sleep, and have likewise seen reductions in the number of SIDS cases but also increases in reports of plagiocephaly, says the new study.

Of the 205 infants in the study observed to have some form of plagiocephaly, 78% were classified as having a mild form, 19% moderate; 3% severe. Most infants (63%) were affected on the right side of the head.

The right-sided preference has been documented in other studies and may be related to a "position of comfort" established by some babies when in the uterus and the birth canal, says Mawji.

According to an American Academy of Pediatrics' 2011 clinical report on positional plagiocephaly, these conditions are "generally benign, reversible" anomalies that do not require surgical intervention, as opposed to craniosynostosis, a serious skull abnormality that can result in neurologic damage and progressive craniofacial distortion.

The vast majority of cases can be corrected with physical therapy and non-invasive measures, according to the AAP. If the condition appears to be worsening by 6 months, referrals should be made to a pediatric neurosurgeon to help determine whether a skull-shaping orthotic helmet or other interventions are needed.

The high incidence rate of positional plagiocephaly in this new study indicates that greater parent education about prevention is needed before infants arrive for the 2-month checkup, says Mawji.

Both the AAP and the National Institutes of Health stress that flat spots are much less serious than SIDS and that parents and caregivers should continue to place infants on their backs to sleep, while incorporating repositioning strategies, including:

• "Tummy time" when the infant is awake and supervised. This not only helps prevent flat spots, but it also helps the head, neck and shoulder muscles get stronger as part of normal development.

**STORY:** [For strong babies, make playtime 'tummy time'](http://usatoday30.usatoday.com/news/health/2008-06-29-baby-workout_N.htm)

• Changing the direction that the infant lies in the crib from one week to the next. This encourages the infant to turn his or her head in different directions to avoid resting in the same position all the time.

• Avoiding too much time in car seats, carriers and bouncers while the infant is awake. Spend "cuddle time" with the child by holding him or her upright over one shoulder often during the day.

• Changing the location of the infant's crib in the room so that the child has to look in different directions to see the door or the window.