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Sudden infant death syndrome (SIDS, Cot death)

What helps to reduce the risk of sudden infant death syndrome?

There are several things you can do to try to reduce the risk of sudden infant death syndrome (cot death).

Key messages about reducing the risk of cot death

- The most important way of reducing the risk of sudden infant death syndrome (cot death) is to put your baby to bed sleeping on their back.
- Sudden infant death is more common in babies whose mothers smoked when they were pregnant. And being around people who smoke also increases a baby's risk of cot death. If you can't give up smoking, you should at least make sure that no one smokes in the room where your baby is.
- Other things that may help are not letting your baby sleep in your bed, making sure your baby **doesn't get too hot**, giving your baby a **dummy**, and keeping soft objects, such as pillow or toys, out of your baby's cot.

However, these things only reduce the risk of sudden infant death. Nothing can get rid of the risk completely.

You should always take your baby to see a doctor or to hospital if you're worried about their health. But cot death doesn't happen after an illness. There aren't any symptoms or warning signs.

We've looked at the research on reducing the risk of cot death. Here are the things you can do that may help.

Place your baby to sleep on their back

Sudden infant death syndrome is more common among babies who sleep on their front.^{1 2} You should always **place your baby to sleep on their back**.^{3 4} Try not to put your baby on their side, as this makes it easier for them to roll onto their front. At about 5 or 6 months, babies can usually roll over by themselves. You shouldn't stop your baby doing this. It's normal at that age, and the risk of cot death is much lower after your baby is 6 months old.⁵

The research shows that the number of cot deaths has fallen in countries where parents are advised to place their babies to sleep on their back.

- One study looked at the effect of a national advice campaign in Norway on cot deaths. It found that the number of cot deaths reduced from 2.3 in 1,000 babies before the campaign to 0.6 in 1,000 babies after the campaign.^{6 7}
- Another study looked at the ways parents were placing their babies to sleep before and after an advice campaign. Before the campaign more than 50 in 100 babies were being placed on their front. But less than 5 in 100 babies were sleeping on their front after advice was given to parents.⁸

The studies found no serious side effects when babies sleep on their back. For example, some parents worry that their baby may breathe in vomit or choke while sleeping on their back. But the research found that there was no extra danger.⁹ ¹⁰

Occasionally, if a baby sleeps on their back, a flat spot can form on the back of their head.^{11 12 13} This goes away with time and doesn't cause any problems as far as we know. Varying your baby's head position slightly each time they sleep for the first few weeks of their life may help to prevent the problem. Letting your baby roll around on their tummy while awake also may help.

There's a rare condition in which a flat spot forms and the bones in a baby's skull join together. This is more serious, but it doesn't seem to be any more likely for babies who sleep on their backs.¹³

Avoid smoking

Sudden infant death syndrome is more likely if you smoke while you're pregnant.¹⁴ It's also **more common** in families **where someone smokes** around the baby.¹⁵

Lots of studies have found that the number of cot deaths reduced after national campaigns advised parents to avoid smoking around their baby.⁶ ⁷

For help and advice about stopping smoking, see our information on Smoking.

We don't know exactly how much the advice to avoid smoking reduces the risk of cot death. That's because the national campaigns included advice about other things too. This other advice also may have reduced the number

of sudden infant deaths. So we don't know how much of the difference was due to people smoking less.

Avoid sharing a bed

Sharing a bed with your baby might make sudden infant death syndrome more likely. The safest place for your baby to sleep is in a cot in your bedroom for the first six months.

It's more dangerous to share a bed with your baby if you or your partner: $\frac{17}{18 4 19}$

- Smoke
- Have been drinking alcohol
- Take a medicine or drugs that make you drowsy
- Feel very tired.

There is a risk you might roll over in your sleep and suffocate your baby. Your baby could also get caught between the wall and the bed, or roll out of bed and be injured.

It's also dangerous to sleep with a baby on a sofa or armchair.⁴ And you shouldn't let your baby sleep alone in an adult bed.

But there isn't much research to show exactly how dangerous sharing a bed is. This sort of study would be hard to do because cot death is rare. And it wouldn't be fair to ask families to do something dangerous just to study the risk.

Avoid overheating or over-wrapping your baby

Sudden infant death syndrome is more likely if a baby **gets too hot** or is wrapped up in lots of blankets or clothes.^{20 21}

Your baby should be lightly clothed for sleep. The temperature of the bedroom should be comfortable for a lightly clothed adult. Your baby shouldn't feel hot to touch.⁴

Some research has shown that the number cot deaths reduced after national campaigns included advice to parents saying that babies shouldn't get too hot.^{6 8} The number of deaths reduced from 1.6 in 1,000 to 0.2 in 1,000 after one campaign.⁶ But advice not to smoke and to put babies to bed on their back was given at the same time. So we can't say how much of the difference was due to keeping babies cool.

Avoid soft sleeping places

Babies are more likely to **die suddenly if they sleep on something soft**, such as a pillow or sofa.^{22 23} You shouldn't place soft materials or objects, such as pillows, quilts or sheepskins, under your sleeping baby.³ Your baby should sleep in a cot on a firm mattress.

You should also keep soft objects, such as pillows or soft toys, out of the cot. And you should use a sheet, with blankets if needed, instead of a duvet or quilt.⁴ Place your baby's feet at the foot of their cot with the bedclothes tucked in around the mattress. The covers should only reach the level of your baby's chest. This will prevent your baby's head being accidentally covered.

Breastfeeding

Sudden infant death syndrome is **less common among babies who are breastfed**.^{6 24} We don't know why this happens. But doctors think there are lots of health benefits that come from breastfeeding, as well as a lower risk of cot death. So doctors usually recommend it.

The number of cot deaths has reduced in countries where campaigns have advised mothers to breastfeed. After one campaign, the number of babies dying from cot death reduced from 1.83 in 1,000 to 0.4 in 1,000.⁸ But the campaign included other advice as well as the recommendation that women breastfeed. So we don't know how much of the difference was because of breastfeeding.

Use a dummy

Cot deaths are **less common among babies who use a dummy** at bedtime.²⁵ There's some good research showing a link between using a dummy and fewer cot deaths.

Some people worry that using a dummy may interfere with breastfeeding or cause a child's teeth to become crooked. But the research shows that these problems tend to be minor and go away in time.³

The Foundation for the Study of Infant Deaths is a charity that aims to help prevent cot death. It says that settling your baby to sleep with a dummy, even for naps, can reduce the risk of cot death.²⁶ This is the advice the Foundation gives.

- Consider giving your baby a dummy when putting them to bed or when they have a nap.
- If the dummy falls out of your baby's mouth once they're asleep, don't put it back in.
- If your baby doesn't seem to want the dummy, don't force them.
- Don't coat the dummy in a sweet liquid.

 If your baby is breastfeeding, don't give them a dummy until they're 1 month old.

It's also a good idea to clean and replace dummies regularly.

Sources for the information on this page:

- 1. Beal SM, Finch CF. An overview of retrospective case-control studies investigating the relationship between prone sleeping position and SIDS. Journal of Paediatrics and Child Health. 1991; 27: 334-339.
- 2. American Academy of Pediatrics. Positioning and SIDS. Pediatrics. 1992; 89: 1120-1126.

3. American Academy of Pediatrics Task Force on Sudden Infant Death Syndrome. The changing concept of sudden infant death syndrome: diagnostic coding shifts, controversies regarding the sleeping environment, and new variables to consider in reducing risk. Pediatrics. 2005; 116: 1245-1255.

- Foundation for the Study of Infant Deaths. BabyZone: how to keep your baby safe and healthy. Available at http://www.fsid.org.uk/babyzone.html (accessed on 10 January 2008).
- 5. Foundation for the Study of Infant Deaths. What is cot death? April 2005. Available at http://www.fsid.org.uk/cot-death.html (accessed 10 January 2008).
- Wennergren G, Alm B, Oyen N, et al. The decline in the incidence of SIDS in Scandinavia and its relation to risk-intervention campaigns. Acta Paediatrica.1997; 86: 963-968.
- 7. Haaland K, Thoresen M. Crib death, sleeping position and temperature. [In Norwegian] Tidsskrift for den Norske Laegeforening. 1992; 112: 1466-1470.
- 8. Kiechl-Kohlendorfer U, Peglow UP, Kiechl S, et al. Epidemiology of sudden infant death syndrome (SIDS) in the Tyrol before and after an intervention campaign. Wiener Klinische Wochenschrift. 2001; 113: 27-32.
- 9. Spiers PS, Guntheroth WG. Recommendations to avoid the prone sleeping position and recent statistics for sudden infant death syndrome in the United States. Archives of Pediatric and Adolescent Medicine. 1994; 148: 141-146.
- 10. Malloy M. Trends in postneonatal aspiration deaths and reclassification of sudden infant death syndrome: impact of the 'Back to Sleep' program. Pediatrics. 2002; 109: 661-665.
- 11. Kane AA, Mitchell LE, Craven KP, et al. Observations on a recent increase in plagiocephaly without synostosis. Pediatrics. 1996; 97: 877-885.
- 12. Gonzalez de Dios J, Moya M, Jimenez L, et al. Increase in the incidence of occipital plagiocephaly. [In Spanish] Revista de Neurologia. 1998; 27: 782-784.
- 13. Christensen L, Ostergaard JR, Nørholt SE. Positional plagiocephaly. Ugeskrift for Laeger. 2002; 165: 46-50 [In Danish].
- 14. Shah T, Sullivan K, Carter J. Sudden infant death syndrome and reported maternal smoking during pregnancy. American Journal of Public Health. 2006; 96: 1757-1759.
- 15. Anderson HR, Cook DG. Passive smoking and sudden infant death syndrome: review of the epidemiological evidence. Thorax. 1997;52:1003-1009.
- 16. Mitchell EA, Aley P, Eastwood J. The national cot death prevention program in New Zealand. Australian Journal of Public Health. 1992; 16: 158-161.
- Mitchell EA, Tuohy PG, Brunt JM, et al. Risk factors for sudden infant death syndrome following the prevention campaign in New Zealand: a prospective study. Pediatrics. 1997; 100: 835-840.
- Horsely T, Clifford T, Barroeman N, et al. Benefits and harms associated with the practice of bed sharing: systematic review. Archives of Pediatric Adolescent Medicine 2007; 161: 237-245.
- 19. Scragg R, Mitchell EA, Taylor BJ, et al. Bed sharing, smoking, and alcohol in the sudden infant death syndrome. BMJ. 1993; 307: 1312-1318.
- 20. Fleming PJ, Blair PS, Bacon C, et al. Environment of infants during sleep and risk of the sudden infant death syndrome: results of the 1993-5 case-control study for confidential enquiry into stillbirths and deaths on infancy. BMJ. 1996; 313: 191-195.
- 21. Ponsonby AL, Dwyer T, Gibbons LE, et al. Thermal environment and sudden infant death syndrome: case-control study. BMJ. 1992; 304: 277-282.
- 22. Mitchell EA, Thompson JM, Ford RP, et al. Sheepskin bedding and the sudden infant death syndrome: New Zealand Cot Death Study Group. Journal of Pediatrics. 1998; 133: 701-704.
- 23. Ponsonby AL, Dwyer T, Gibbons LE, et al. Factors potentiating the risk of sudden

infant death syndrome associated with the prone position. New England Journal of Medicine. 1993; 329: 377-382.

- 24. Mitchell EA, Taylor BJ, Ford RP, et al. Four modifiable and other major risk factors for cot death: the New Zealand study. Journal of Paediatric Child Health. 1992; 28 (supplement 1): S3-S8.
- 25. Zotter H, Kerbl R, Kurz R, et al. Pacifier use and sudden infant death syndrome: should health professionals recommend pacifier use based on present knowledge? Wiener Klinische Wochenschrift. 2002; 114: 791-794.
- 26. Foundation for the Study of Infant Deaths. New dummy advice. June 2007. Available at http://www.fsid.org.uk/dummies.html (accessed on 10 January 2008).

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