

ICEA Position Paper

Safe Infant Sleep

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Position

All expectant parents should be given evidence-based information on normal maternal and infant physiology, behaviors surrounding feeding and sleep, and on naptime and nighttime safety in order to make informed decisions about where their babies will sleep.

Background

Holding a sleeping baby is one of the sweetest experiences of new parenthood. However, there are concerns about the safety of parents and infants falling asleep together. Prior to the early 1990s, health authorities realized that some babies died unexpectedly, often in cribs or cots, leading to a general fear of “cot death,” later defined as Sudden Infant Death Syndrome or SIDS. At that time, nearly all authorities recommended that parents place their babies prone (face down) to sleep, reasoning erroneously that if a supine (face-up) baby spit up, it could choke. In 1991, research in New Zealand revealed that 80% of babies who died unexpectedly had at least one of three factors in common: maternal smoking, prone (face-down) position of the baby, and formula-feeding. Health authorities reversed their advice on placing babies prone for sleep, and almost overnight “back to sleep” messages emerged.

SIDS and suffocation are two distinct and rare risks to infants in the early months. SIDS is a diagnosis of exclusion: no reason for the baby’s death can be found despite autopsy and a thorough investigation of scene

and circumstances. The highest risk factors for SIDS are well-documented: (1) Smoking is the highest risk factor for SIDS¹. Maternal smoking during pregnancy and/or smoking by anyone in the household, even if the smoker goes outside², is a dose-dependent risk factor. (2) Placing the baby prone for sleep is also a well-established risk³. (3) Formula-feeding, even partial formula-feeding, increases SIDS risk⁴. (4) Babies sleeping alone and unattended (out of sight and sound of a responsible caregiver), and babies in daycare are at increased risk.⁵

The majority of suffocation, entrapment, and smothering deaths (ASSB – Accidental Suffocation and Strangulation in Bed) during shared sleep occur on couches or sofas, and/or involve alcohol or drug use by the baby’s bed partner.⁶ ASSB during solitary sleep is more common when the baby is alone or unattended during sleep, including in day care situations.^{7,8}

Confusing Definitions

“Co-sleeping”, which is often assumed to mean mother and baby sharing a bed, has no consistent, clear definition. The term does not define *who* the baby’s bed partner is, *where* the person is, the person’s *condition*, the *safety* of the baby’s sleep surface, and whether or not that surface is a *bed*. Co-sleeping can thus be done safely or unsafely. “Bedsharing” usually means that a baby is sharing a sleep surface with someone, but does not define *who* the person is, nor their *condition*, nor the *surface*. Bedsharing can thus be done safely or unsafely.

Many research articles and policy statements still confuse SIDS and smothering (ASSB), or lump them together under the more vague term SUID (Sudden

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Unexpected Infant Death) or SUDI (Sudden Unexpected Death in Infancy.) Conflating SIDS and ASSB weakens studies, causes parental confusion and fear, and can increase risk. Breastfeeding mothers may share a sleep surface with their babies at least part of the time⁹, deliberately or accidentally. Parents who believe their bed is a risk factor for SIDS may move to the sofa or chair, which is a higher risk factor for ASSB.^{10,11}

Understanding Normal Sleep

Pregnant women are quite familiar with broken sleep. That pattern continues into the postpartum months, regardless of how mothers feed their babies¹³. After birth, infants sleep in short (1 to 1½ hour) cycles. To thrive, they need milk frequently because of their very small stomachs¹⁴ and very rapid growth. Frequent nursing or feeding day and night is normal for babies. By 3 months, patterns have begun to emerge in the baby's sleep and feeding cycles¹⁵.

Frequent kind touch and gentle holding for many hours a day is nearly as important to babies' overall development as food.¹⁶ Breastfeeding ensures both. Breastfeeding is fundamental to a baby's normal health and development.

Safety Issues

An infographic by La Leche League, "Safe Sleep Seven: Smart Steps to Safer Bedsharing," lists seven criteria that vastly reduce the major SIDS and smothering risks. "If a mother is: 1) A non-smoker; 2) Sober; and 3) Breastfeeding ... And her baby is: 4) Healthy; 5) On his back; and 6) Lightly dressed and 7) unswaddled.

The following information will help explain how to educate parents on these steps:

- › Prenatal smoking and environmental smoke represent the single greatest risk factor for SIDS.
- › Alcohol and sedating drugs can impair an adult's awareness during sleep. Many ASSB deaths involve alcohol or drug use by the baby's caregiver.⁶
- › Breastfeeding mother-baby dyads sleep differently from anyone else. The breastfeeding mother provides frequent stimulation through touching, shifting, and feeding throughout the night. Formula-fed babies rouse from sleep less readily

than breastfed babies; have more than double the risk of (SIDS);⁴ and have many other health problems. Virtually every health authority in the world recommends exclusive breastfeeding for the first six months starting in the first hours after giving birth, then continued breastfeeding while adding family foods till the child is at least two years old.

- › Babies should be lightly clothed (not overheated)
- › Babies should not be swaddled for feedings or during sleep; swaddling prevents a baby from shifting his position as conditions change. Studies have reported swaddling as an independent risk factor for SIDS
- › Researchers who support and oppose early bedsharing agree that by 4 months bedsharing with a responsible, non-smoking caregiver (not necessarily the breastfeeding mother) carries no added risk to the baby
- › To create a safe surface, parents should avoid thick covers, toys, pets, and use a firm, clean, flat mattress. Any cracks or gaps should be widened or packed tightly, to avoid entrapment. Cords, strings, and sharp objects should be removed. Other children should not sleep next to the baby. A side-car attached to the bed can be a good option. A safe crib for the baby in the parents' bedroom is safer than baby sleeping unattended in another room. (AAP)
- › Sleep happens, and exhaustion sometimes overrules caution. ICEA strongly recommends baby-proof the family bed, even if they have no plans to bedshare.
- › Adults should avoid lying down with a baby on a sofa or in a recliner, even "just for a minute" because the threat of suffocation, entrapment, or dropping the baby is especially high if the adult falls asleep. If a sofa or recliner is the only option for sleep, the adult can consider leaning back and fastening the baby securely to their chest with a scarf, shawl, wrap or soft carrier, to keep the baby chest-to-chest when the adult falls asleep.
- › "Sleep training" programs attempt to get babies to sleep for unnaturally long stretches at night. Babies cry when they need to be touched held, fed, and nurtured, and cannot meet those needs themselves. Crying is a late sign of stress and should never be ignored.

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The American Academy of Pediatrics Policy Statement: SIDS and Other Sleep-Related Infant Deaths: Updated 2016 Recommendations for a Safe Infant Sleeping Environment

On October 24, 2016 the AAP released the policy statement with the following recommendations and suggests parents have open, non-judgmental conversations on safe infant sleep practices.

1. Breastfeeding is recommended to reduce the risk of SIDS and to enhance the health and well-being of the infant and the mother. The AAP recommends **exclusive** breastfeeding for 6 months (no formula, nutritional liquids or solid foods). Newer research demonstrates that exclusive breastfeeding can reduce the risk of SIDS by as much as 70%.
2. Skin to skin care is recommended for all mothers and newborns, regardless of feeding or delivery method...for at least an hour after birth
3. Room-sharing with the infant on a separate sleep surface is recommended. Keep infants in close proximity to parents for the first 6 to 12 months of life.
4. The AAP recognizes that parents may fall asleep in bed after or during feeding their infant, so remove pillows, loose blankets, loose sheets and move the bed away from walls to prevent entrapment, and follow remainder of safe sleep recommendations.
5. Avoid nighttime feeding on couches and arm chairs which are not considered safe sleep surfaces at any time for infants.
6. Sleep position – It is important that anyone who cares for the infant puts the baby to sleep on their back. Prone sleeping (sleeping on the stomach) increases the risk of rebreathing the same air that is under the baby's face which can increase the levels of carbon dioxide in their blood, not enough oxygen in their blood which can be potentially fatal.
7. Creating a safe sleep surface. Recommendations from the National Action Partnership to Promote Safe Sleep (in partnership with the AAP) recommends:

“Use a firm (this means not soft, cushiony) sleep surface, such as a mattress in a safety-approved crib covered by a fitted sheet, to reduce the risk of SIDS and other sleep-related causes of infant death. Firm sleep surfaces with

no other bedding or soft objects. Nothing soft such as pillows etc. should be placed under the baby. Appropriate surfaces can include safety approved cribs, bassinets, and portable play areas. Safety approved cribs are those that have been manufactured and sold since the requirements went into effect on June 28, 2011. They have been designed to have the spaces between the bars too small for a baby's head to get through and get stuck. Standards for other safety approved spaces such as bassinets, portable play areas and side cars (attachment to an adult bed that provides a separate, but close safe space) have also been developed by the U.S. Consumer Product Safety Commission.

Other considerations for safe sleep surfaces:

- a. Do not use bumper pads in a crib.
 - b. Never place baby to sleep on soft surfaces, such as on a couch or sofa, pillows, quilts, sheepskins, or blankets.
 - c. When using a sling to carry a baby, make sure the baby's face is facing up and is above the fabric completely uncovered and open to the air.
 - d. Do not use a car seat, carrier, swing, or similar product as baby's everyday sleep area.
 - e. Infants should not be placed to sleep on adult beds. Portable bed railings intended to keep a child from falling off a bed should not be used for infants.”
8. Avoid smoking, alcohol, and drugs during pregnancy and after birth
 9. Avoid devices marketed to reduce risk of SIDS such as monitors, wedges, devices or specific mattresses
 10. Swaddling does not reduce the risk of SIDS and in some cases may increase the risk for overheating and SIDS
 11. Consider offering a pacifier at nap or bed time, after breastfeeding is firmly established (no specified time frame). If not breastfed can introduce as soon as family desires
 12. Supervised, awake tummy time is recommended to facilitate development and to minimize development of positional plagiocephaly.

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Sources of Evidence-based Information

- › La Leche League International's Sweet Sleep: Nighttime and Naptime Strategies for the Breastfeeding Family – www.llli.org/sweetsleepbook
- › Dr. Kathy Kendall-Tackett – <http://www.uppitysciencechick.com/sleep.html>
- › Dr. Helen Ball – Infant Sleep Information Source – <https://www.isisonline.org.uk/>
- › Dr. James McKenna – Mother-Baby Behavioral Sleep Laboratory – <http://cosleeping.nd.edu/>
- › Babywearing International – <http://babywearinginternational.org/>
- › Academy of Breastfeeding Medicine Protocol #6 – http://www.bfmed.org/Media/Files/Protocols/Protocol_6.pdf
- › Safe to Sleep NICHD campaign – <https://www.nichd.nih.gov/sts/Pages/default.aspx>
- › American Academy of Pediatrics – <https://www.aap.org/en-us/advocacy-and-policy/federal-advocacy/Pages/breastfeeding.aspx>; <https://www.healthychildren.org/English/ages-stages/baby/sleep/Pages/A-Parents-Guide-to-Safe-Sleep.aspx>
- › American Academy of Pediatrics, 2013 – Swaddling: Is it safe? – Elk Grove Village, IL
- › American Academy of Pediatrics. First Candle. n.d. Safe sleep image guidelines. Forest Hill, MD: First Candle. Safe to Sleep® Public Education Campaign. 2014. What does a safe sleep environment look like? Reduce the risk of SIDS and other sleep-related causes of infant death. Bethesda, MD: Eunice Kennedy Shriver National Institute of Child Health and Human Development. Task Force on Sudden Infant Death Syndrome, Moon RY. 2011. SIDS and other sleep-related infant deaths: Expansion of recommendations for a safe infant sleeping environment. *Pediatrics*, 128(5):1030-1039 (policy statement); e1341-e1367 (technical report).
- › <http://pediatrics.aappublications.org/content/128/5/e1341.short>
- › <https://awhonn.files.wordpress.com/2015/10/tips-for-nurses-teaching-safe-sleep-in-the-hospital-setting.pdf>

Implications for Practice

Childbirth educators and doulas can help new families care for their babies safely during nights and naps by providing information, anticipatory guidance and research-based resources free from conflicts of interest. Our mission of giving parents freedom to make decisions through knowledge of alternatives requires that students/clients are aware of the risks of unsafe sleep situations, unsafe bedsharing, tobacco smoking, alcohol use during pregnancy and postpartum, and other health risks. The educator or doula should be familiar with which facilities in her community are designated as Baby-Friendly Hospitals™ or birth centers, or are working toward this designation. The educator or doula should be familiar with resources that take into account the normal sleep patterns and behaviors of the breastfeeding mother-baby dyad. She should be able to refer childbearing families to the sources listed in this document.

AWHONN (Association of Women's Health, Obstetrics and Neonatal Nursing) suggests In their Tips for Nurses Teaching Safe Sleep in the Hospital Setting:

“Be supportive even if parents do not think they can follow all of the recommendations, but also speak up when there is a serious risk for danger. Be conversational in your approach and use phrases such as “safer” and “safest”. Avoid “never” and other all-or-nothing terms as much as possible. That being said, there are some practices that are extremely dangerous, such as bed-sharing with a baby born premature or with parents that smoke, so at times stronger (but kind) words about the risk they will be taking need to be used.”

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References

1. Carpenter R, McGarvey C, Mitchell EA, et al. Bed sharing when parents do not smoke: is there a risk of SIDS? An individual level analysis of five major case-control studies. *BMJ Open*. January 1, 2013;2013(3):5.
2. van der Vaart H, Postma DS, Timens W, et al. Acute effects of cigarette smoking on inflammation in healthy intermittent smokers. *Respir Res*. 2005;6:22.
3. Dwyer T, Ponsonby AL. Sudden infant death syndrome and prone sleeping position. *Ann Epidemiol*. Apr 2009;19(4):245-249.
4. Hauck FR, Thompson JMD, Tanabe KO, Moon RY, Vennemann MM. Breastfeeding and Reduced Risk of Sudden Infant Death Syndrome: A Meta-analysis. *Pediatrics*. June 13, 2011;2011(6):e1177-1182.
5. Carpenter RG, Irgens LM, Blair PS, et al. Sudden unexplained infant death in 20 regions in Europe: case control study. *Lancet*. Jan 17 2004;363(9404):185-191.
6. Blabey MH, Gessner BD. Infant bed-sharing practices and associated risk factors among births and infant deaths in Alaska. *Public Health Rep*. Jul-Aug 2009;124(4):527-534.
7. Hofer MA. Psychobiological Roots of Early Attachment. *Current Directions in Psychological Science*. April 1, 2006;2006(15):84-88.
8. Moon RY, Sprague BM, Patel KM. Stable Prevalence but Changing Risk Factors for Sudden Infant Death Syndrome in Child Care Settings in 2001. *Pediatrics*. October 1, 2005;2005(116):972-977.
9. Blair PS, Sidebotham P, Pease A, Fleming PJ. Bed-Sharing in the Absence of Hazardous Circumstances: Is There a Risk of Sudden Infant Death Syndrome? An Analysis from Two Case-Control Studies Conducted in the UK. *PLoS One*. 2014;9(9):e107799.
10. Kendall-Tackett K, Cong Z, Hale T. Mother-Infant Sleep Locations and Nighttime Feeding Behavior: U.S. Data from the Survey of Mothers' Sleep and Fatigue. *Clinical Lactation*. 2010;1(Fall 2010):27-31.
11. Blair PS, Sidebotham P, Evason-Coombe C, Edmonds M, Heckstall-Smith EM, Fleming P. Hazardous cosleeping environments and risk factors amenable to change: case-control study of SIDS in south west England. *BMJ*. 2009;339:b3666.
12. McKenna JJ, Gettler LT. There is no such thing as infant sleep, there is no such thing as breastfeeding, there is only breastsleeping. *Acta Paediatr*. Aug 21 2015.
13. Montgomery-Downs HE, Stremler R, Insan SP. Postpartum Sleep in New Mothers and Fathers. *Open Sleep Journal*. 2013;6(Suppl 1: M11):87-97.
14. Bergman NJ. Neonatal stomach volume and physiology suggest feeding at 1-h intervals. *Acta Paediatr*. May 10 2013.
15. Moore T, Ucko LE. Night waking in early infancy. *Arch Dis Child*. Aug 1957;32(164):333-342.
16. Feldman R, Singer M, Zagoory O. Touch attenuates infants' physiological reactivity to stress. *Dev Sci*. Mar 2010;13(2):271-278.
17. La Leche League International, Wiessinger D, West D, Smith LJ, Pittman T. *Sweet Sleep: Nighttime and Naptime Strategies for the Breastfeeding Family*. New York: Random House - Ballantine Books; 2014.
18. McKenna JJ, Ball HL, Gettler LT. Mother-infant cosleeping, breastfeeding and sudden infant death syndrome: what biological anthropology has discovered about normal infant sleep and pediatric sleep medicine. *Am J Phys Anthropol*. 2007;Suppl 45:133-161.
19. Mosko S, Richard C, McKenna J. Infant arousals during mother-infant bed sharing: implications for infant sleep and sudden infant death syndrome research. *Pediatrics*. Nov 1997;100(5):841-849.
20. Ball HL. Breastfeeding, bed-sharing, and infant sleep. *Birth*. Sep 2003;30(3):181-188.
21. Ball HL. Bed-sharing practices of initially breastfed infants in the first 6 months of life. *Infant and Child Development*. 2007;16(4):387-401.
22. US Department of Health and Human Services. The Surgeon General's Call to Action to Support Breastfeeding. Washington, DC: US Department of Health and Human Services, Office of the Surgeon General; 2011.
23. American Academy of Pediatrics. Breastfeeding and the Use of Human Milk. *Pediatrics*. March 1, 2012;2012(129):e827-e841.
24. Moon RY. SIDS and other sleep-related infant deaths: expansion of recommendations for a safe infant sleeping environment. *Pediatrics*. Nov 2011;128(5):1030-1039.
25. Uvnas-Moberg K. *The Oxytocin Factor*. Cambridge MA: Da Capo Press / Perseus Books Group; 2003.
26. Ponsonby AL, Dwyer T, Gibbons LE, Cochrane JA, Jones ME, McCall MJ. Thermal environment and sudden infant death syndrome: case-control study. *BMJ*. Feb 1 1992;304(6822):277-282.
27. Richardson HL, Walker AM, R SCH. Influence of Swaddling Experience on Spontaneous Arousal Patterns and Autonomic Control in Sleeping Infants. *J Pediatr*. Mar 12 2010.
28. Pease AS, Fleming PJ, Hauck FR, et al. Swaddling and the Risk of Sudden Infant Death Syndrome: A Meta-analysis. *Pediatrics*. 2016-05-09 00:05:32 2016.
29. Blair PS, Fleming PJ, Smith IJ, et al. Babies sleeping with parents: case-control study of factors influencing the risk of the sudden infant death syndrome. CESDI SUDI research group. *BMJ*. Dec 4 1999;319(7223):1457-1461.
30. Ball HL, Ward-Platt MP, Heslop E, Leech SJ, Brown KA. Randomised trial of infant sleep location on the postnatal ward. *Arch Dis Child*. Dec 2006;91(12):1005-1010.
31. Volpe LE, Ball HL, McKenna JJ. Nighttime parenting strategies and sleep-related risks to infants. *Soc Sci Med*. Feb 2013;79:92-100.
32. Ball HL, Volpe LE. Sudden Infant Death Syndrome (SIDS) risk reduction and infant sleep location - Moving the discussion forward. *Soc Sci Med*. Apr 21 2012.
33. Hitchcock, S. Nurses' Critical Role in Preventing Sleep-Related Deaths: A Call to Action. AWHONN blog, April 26, 2016.
34. Centers for Disease Control and Prevention . (2015). Sudden unexpected infant death. Retrieved August 20, 2015, from <http://www.cdc.gov/sids/aboutsuidandsids>

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Teaching Points for Childbirth Educators

1. Normal Sleep for infants and postpartum mothers
 - a. Breastfeeding is normal and protective against SIDS. Get help if it's not going smoothly.
 - b. All new mothers have fragmented sleep during postpartum period unrelated to feeding method.
 - c. Healthy newborns sleep in short stretches and nurse/feed many times around the clock, including at night.
 - d. "Sleep training" is dangerous for neonates; babies should not be left to cry!
2. Plan for safety for all sleeps, day and night
 - a. Baby prone (face up), unswaddled, and lightly dressed. If a baby is sweaty, they're too hot.
 - b. Room-sharing: baby should always sleep within sensory distance of a responsible adult.
 - c. Create a smoke-free environment. Baby should sleep at least 8" away from the exhaled breath of any smokers, even parents. Exhaled breath of smokers is risky; second-hand smoke also raises the risk of SIDS.
 - d. Cribs, cots, side-car devices should have a clean firm well-fitted mattress and nothing else.
 - e. Unplanned sleep situations are risky; you WILL fall asleep even when you don't plan to. Plan for safety every time you feed, hold, and cuddle the baby.
 - f. Encourage expectant and new parents to have open, honest discussions with the Pediatricians about safe sleep practices

Resources and Suggested Handouts for Childbirth Classes

- › <http://www.Illi.org/sweetsleepbook/infographic> (both sides)
- › Infant Sleep Information Source – <https://www.isisonline.org.uk/>
- › Dr. James McKenna – Mother-Baby Behavioral Sleep Laboratory – <http://cosleeping.nd.edu/>
- › Academy of Breastfeeding Medicine Protocol #6 – http://www.bfmed.org/Media/Files/Protocols/Protocol_6.pdf
- › Safe to Sleep NICHD campaign – <https://www.nichd.nih.gov/sts/Pages/default.aspx>
- › <https://awhonn.files.wordpress.com/2015/10/tips-for-nurses-teaching-safe-sleep-in-the-hospital-setting.pdf>