



July 13, 2007

Dear Colleagues:

We would like to take this opportunity to introduce the recently completed Calgary Health Region Best Practice Guidelines for Infant Sleep Practices, and the literature review, *Examining the Evidence Regarding Infant Sleeping Practices and Sudden Infant Death Syndrome* (Trifunov, 2006). These documents were developed to provide staff with key safety recommendations for instructing families regarding safe infant sleep practices, and to ensure a consistent message to parents regarding the Calgary Health Region's position on infant sleep practices. These guidelines support the recent evidence based recommendations on a safe infant sleep environment from the Canadian Paediatric Society, Health Canada and the American Academy of Pediatrics.

The Calgary Health Region Best Practice Guidelines for Infant Sleep Practices were developed in consultation with the Departments of Pediatrics, Child and Youth Community Health Services, Rural Health, Child and Adolescent Mental Health, Health Link, Women's Health, Child Health Programs and Healthy Living.

A multidisciplinary committee, chaired by Maureen Devolin and Anila Ramaliu from Healthy Living, worked over the past four years to review the evidence, consult with experts and draft the guidelines. The Committee was comprised of a wide range of health professionals representing a number of areas in the Region including: two Pediatric Pulmonologists, a neonatologist, the postpartum Community Services Manager, a Lactation Consultant, Educators from Public Health, Collaborative Mental Health, representatives from Postpartum, ACH Sleep Clinic, Rural, Neonatal Transitional Care Program, Perinatal Education, Calgary Health Link, 3 Cheers Parenting Project, Injury Prevention, and the Coordinator of Healthy Babies.

### **Implementation**

Implementation of these guidelines is now underway. Copies of the guidelines and the review of the evidence based literature will be distributed during professional in-services. Web access to these guidelines and the review of the evidence based literature are available through the Calgary Health Region's Clinical Practice Guideline page. Please communicate the availability of the guidelines and supporting evidence with your peers and other health care providers who may be involved with families with infants.

As sponsors of this initiative we support the application of these guidelines. This work contributes to enhancing the consistency, quality and coordination of care for families in the Calgary Health Region. Thank you in advance for your attention and interest in supporting the application of these guidelines.

Please direct any comments, questions or evidence updates regarding the guidelines to Anila Ramaliu, Chair of the Regional Infant Sleep Committee at (403) 943-8006.

Sincerely,



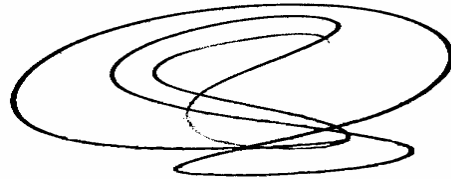
Bretta Maloff  
Director, Healthy Living




Dr. Richard Musto  
Executive Medical Director  
SouthEast Community Portfolio



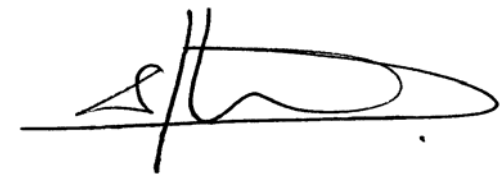
Laurie Blahitka  
Director, Women's Health



Dr. Ian Lange  
Regional Clinical Department Head  
Obstetrics & Gynecology



Caroline Hatcher  
Director, Emergency/  
Urgent Care Services/ Health Link



Dr. Rod Elford  
Medical Director, Calgary Health Link



Janet Chafe  
Program Director,  
Child and Adolescent Mental Health



Dr. Don Addington  
Head/ Administration, Psychiatry



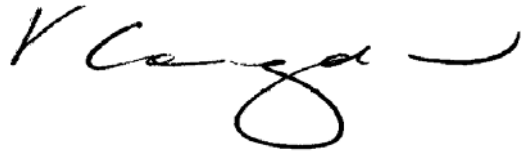
Dr. Brent Scott  
Regional Clinical Department Head,  
Pediatrics



Maureen Best  
Director, Child & Youth Community  
Health Services



Lori Anderson  
Executive Director Rural Health



Dr. Val Congdon  
Regional Clinical Department Head,  
Rural Medicine



Toni Macdonald  
Director Child Health Programs

**Subject/Title: Best Practice Guidelines For:  
Infant Sleep Practices – Bed-sharing**

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**Date: Initial July 13, 2007 / reviewed**

**Guideline Development Authors: Regional Infant Sleep Committee**

**Target Population:** This guideline applies to all pre and post natal families (with infants up to 12 months of age)

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**PURPOSE**

1. To provide staff with key safety recommendations for instructing families regarding safe infant sleep practices.
2. To provide consistency across the maternal\infant continuum of care services, in communicating and applying recommendations with respect to **infant** bed-sharing.

**BACKGROUND**

In Alberta in 2005 about 1 in every 1750 infant deaths were attributed to SIDS (1). The Canadian Paediatric Society and Health Canada recognize that the safest place for an infant to sleep, in the first year of life, is in a crib that meets Canadian Government Safety Standards<sup>1</sup>. The Canadian Paediatric Society and the American Academy of Pediatrics recommended that the infant sleep in the parent's room for the first six months (2-4).

Many parents elect to share a sleeping surface such as an adult bed with their infant for breastfeeding or comforting. When parents bring their infant into bed to sleep (bed-sharing) there is a significant increased risk to the baby (5-7). The risks of bed-sharing such as, falling, getting trapped, suffocating, being rolled onto or over, and the increased risk of Sudden Infant Death Syndrome (SIDS) must be carefully explained to parents. Parents who choose to bed-share need to know methods for improving the safety of the sleeping environment, but should also be advised that "...when infants sleep in their own crib, they are significantly safer than when they bedshare." (2)

**DEFINITIONS**

**Bed-sharing:** "a sleeping arrangement in which the baby shares the same sleeping surface with another person." (2)

**Room-sharing:** a sleeping arrangement in which the infant shares the same room, but not the same sleeping surface, as their parents (2). Room sharing is suggested for the first six months.

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<sup>1</sup> Crib safety standards are outlined in the Government of Canada booklet "Crib Safety" Health Canada. Crib Safety: Minister of Health; Report No.: Cat. H46-2/03-332.

Co-sleeping is another term used in the academic and popular literature. However, this term is used inconsistently and can mean a variety of sleeping arrangements including sharing a room and/or bed-sharing. As such, we recommend not using this term, to avoid confusion in intended meaning.

### **Best Practice Guideline Endorsement:**

The Calgary Health Region fully supports and endorses the best practice recommendations as detailed in this guideline – “to neither recommend nor endorse bed-sharing, as sleeping surfaces not intended for infants are not as safe as their own crib”.

### **Integration of Infant Sleep Guidelines into practice:**

#### **1. Staff Accountability**

All Staff involved with pre and post natal families will:

- 1.1 Acquaint him/herself with the “*Infant Sleep Practices – Bed-Sharing*” guidelines on the Calgary Health Region’s Clinical Practice Guidelines website and be accountable for practicing according to the guidelines described within.
- 1.2 Verify parent’s understanding of the infant sleep practice message as described in the “*From Here Through Maternity*” manual or the pamphlet “*Safe Sleeping for your Baby’s first Year*”.

#### **2. Family Education;**

Family education is to include instruction on:

- 2.1 The safest position and place for a baby to sleep
- 2.2 The risks of bed-sharing
- 2.3 Reducing the risks of bed-sharing while breastfeeding
- 2.4 Circumstances where bed-sharing should absolutely be avoided

### **POINTS OF EMPHASIS**

#### **1. Safe Sleeping**

Unless otherwise ordered by a physician or registered midwife, infants are placed on their backs to sleep. See “*Sleep Position: Infants*” Policy and Procedure in the *Women and Infant Health Manual*.

The Calgary Health Region and the Canadian Paediatric Society recommend that for the first year of life, the safest place for babies to sleep is in their own crib that meets Canadian Government Safety Standards(2). Safety standards specify that the infant’s crib should have:

- A firm, flat mattress that is in good condition and fits snugly into the crib
- A tight fitting bottom sheet
- Slats that are not more than 6cm (2 3/8 inches) apart
- A sticker indicating it was made after September 1986

It is further recommended that the infant sleep in the parent’s room for the first six months (2, 8, 9). Room-sharing provides benefits such as increased breastfeeding and monitoring and a reduction in the risk of SIDS (8, 9).

Other surfaces such as adult beds, air mattresses, sofas, armchairs, recliners, loose cushions; soft surfaces such as a waterbed, bean bag chair or down comforter; and siblings' beds are not designed for a baby and should not be used as a sleeping surface (2, 3, 10, 11). A sofa is a particularly hazardous sleeping environment for an infant (2, 3, 5, 11) and parents should be told that this is not a safe alternative to sharing an adult bed.

## **2. Circumstances where bed-sharing should be absolutely avoided**

The risk to an infant is significantly increased, and bed-sharing should never occur, when any of the bed sharers:

- is a smoker, whether they smoke around the baby or not. Exposure to smoke, before and after birth and during pregnancy, significantly increases the risk of SIDS (6, 11-14)
- is obese
- is overtired to the point that they may not respond to the baby
- has an illness or condition which affects awareness of the baby
- has taken any alcohol or drugs (over-the-counter, prescription, or street drugs) which would decrease the ability to respond to the baby (6, 12, 15)

If the baby was born preterm, or was small at birth, parents should not bed-share (10, 14).

## **3. Risks of Bed-sharing**

Adult beds are not designed for infants and there are increased risks to the infant's safety if they are not returned to their own crib to sleep after breastfeeding or comforting (8, 11). Babies can fall, suffocate, get trapped or wedged between structures and are in danger of being rolled onto or over by others sharing the bed (16). There is an increased risk of Sudden Infant Death Syndrome (SIDS) associated with bed sharing (17). It is often difficult to distinguish between smothering and SIDS as the cause of death (18, 19) therefore, anything that increases the risk to the child should be avoided.

## **4. Reducing the risk of bed-sharing**

Despite the increased risk, some parents may still choose to bed-share with their infant. If a parent makes an informed decision to bed-share, they should be given the following instructions to reduce the potential hazards:

- The mattress must be firm and flat (5)
- Infants must be placed on their backs for sleep (5, 6, 12-14, 20)
- The baby's sleeping area must be free from stuffed toys, pillows, and heavy covers (5)
- They must ensure that the baby will not fall out of bed or get stuck between the mattress and the wall, headboard or footboard (16)
- The room must not be too hot or the baby overdressed (12, 21)
- There must be no covers over the baby's head (5, 12)
- They must not use positioning devices such as wedges, rolled up towels or blankets
- The baby must not be left alone in the bed

- Any adults sharing the bed must know that the baby is in the bed (22)
- No other children should be in the bed (5)

While these measures may make bed-sharing safer, parents should be advised that “when infants sleep in their own crib, they are significantly safer than when they bedshare.”(2)

## REFERENCES

1. Government of Alberta. Alberta Vital Statistics Annual Review 2005: Government Services. Report No.: ISSN 1485-3809.
2. Canadian Paediatric Society. Position Statement (CP 2004-02) Recommendations for safe sleeping environments for infants and children. *Paediatr Child Health*. 2004;9(9):659 to 63.
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. Policy Statement. *Pediatrics*. 2005;116(5):1245-55.
4. Health Canada. Health Canada advises that infants and young children should never sleep on mattresses not specifically designed for them. [Advisory]. Ottawa: Health Canada; 2003.
5. Hauck FR, Herman SM, Donovan M, Iyasu S, Merrick Moore C, Donoghue E, et al. Sleep environment and the risk of sudden infant death syndrome in an urban population: the Chicago Infant Mortality Study. *Pediatrics*. 2003 May;111(5 Part 2):1207-14.
6. Carpenter RG, Irgens LM, Blair PS, England PD, Fleming P, Huber J, et al. Sudden unexplained infant death in 20 regions in Europe: case control study. *Lancet*. 2004 Jan 17;363(9404):185-91.
7. Scheers NJ, Rutherford GW, Kemp JS. Where should infants sleep? A comparison of risk for suffocation of infants sleeping in cribs, adult beds, and other sleeping locations. *Pediatrics*. 2003 Oct;112(4):883-9.
8. Scragg RK, Mitchell EA, Stewart AW, Ford RP, Taylor BJ, Hassall IB, et al. Infant room-sharing and prone sleep position in sudden infant death syndrome. New Zealand Cot Death Study Group. *Lancet*. 1996 Jan 6;347(8993):7-12.
9. McKenna JJ, McDade T. Why babies should never sleep alone: a review of the co-sleeping controversy in relation to SIDS, bedsharing and breast feeding. *Paediatr Respir Rev*. 2005 Jun;6(2):134-52.
10. Blair PS, Sidebotham P, Berry PJ, Evans M, Fleming PJ. Major epidemiological change in sudden infant death syndrome: A 20 year population-based study in the U.K. *The Lancet*. 2006;367:314-9.
11. Blair PS, Fleming PJ, Smith IJ, Platt MW, Young J, Nadin P, 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*. 1999 Dec 4;319(7223):1457-61.
12. Fleming PJ, Blair PS, Bacon C, Bensley D, Smith I, Taylor E, et al. Environment of infants during sleep and risk of the sudden infant death syndrome: results of 1993-5 case-control study for confidential inquiry into stillbirths and deaths in infancy. Confidential Enquiry into Stillbirths and Deaths Regional Coordinators and Researchers. *Bmj*. 1996 Jul 27;313(7051):191-5.
13. McGarvey C, McDonnell M, Chong A, O'Regan M, Matthews T. Factors relating to the infant's last sleep environment in sudden infant death syndrome in the Republic of Ireland. *Arch Dis Child*. 2003 Dec;88(12):1058-64.
14. Mitchell EA, Taylor BJ, Ford RP, Stewart AW, Becroft DM, Thompson JM, et al. Four modifiable and other major risk factors for cot death: the New Zealand study. *J Paediatr Child Health*. 1992;28 Suppl 1:S3-8.
15. Gessner BD, Ives GC, Perham-Hester KA. Association between sudden infant death syndrome and prone sleep position, bed sharing, and sleeping outside an infant crib in Alaska. *Pediatrics*. 2001 Oct;108(4):923-7.
16. Drago DA, Dannenberg AL. Infant mechanical suffocation deaths in the United States, 1980-1997. *Pediatrics*. 1999 May;103(5):e59.

17. Blaire PS, Sidebotham P, Berry PJ, Evans M, Fleming PJ. Major epidemiological change in sudden infant death syndrome: A 20 year population-based study in the U.K. *The Lancet*. 2006;367:314-9.
18. British Columbia Coroners Service CDRU. Special Report: Infant Deaths 2003-2004; (n.d.).
19. Byard R, Krous H. Suffocation, shaking or sudden infant death syndrome: can we tell the difference? *J Paediatr Child Health*. 1999 Oct;35(5):432-3.
20. Gilbert R, Salanti G, Harden M, See S. Infant sleeping position and the sudden infant death syndrome: systematic review of observational studies and historical review of recommendations from 1940 to 2002. *Int J Epidemiol*. 2005 Aug;34(4):874-87.
21. Fleming PJ, Gilbert R, Azaz Y, Berry PJ, Rudd PT, Stewart A, et al. Interaction between bedding and sleeping position in the sudden infant death syndrome: a population based case-control study. *Bmj*. 1990 Jul 14;301(6743):85-9.
22. Collins KA. Death by overlaying and wedging: a 15-year retrospective study. *Am J Forensic Med Pathol*. 2001 Jun;22(2):155-9.

**CROSS REFERENCES**

Subject/Title	Number	Manual
Sleep Positions: Infants	4-S-3	Women's & Infant Health Manual
Breastfeeding Support	3-B-2	Women's & Infant Health Manual
From Here Through Maternity, CHR		Available to all pregnant women in Calgary Health Region, through physician offices, perinatal education, hospital maternity units and community health centres
Safe Sleeping for Your Baby's First Year		Available at 3 cheers website
Information for Professionals on Safe Infant Sleep Practices and Sudden Infant Death Syndrome (SIDS)		Available at 3 cheers website