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## Crib Bumper Pads and Sudden Infant Death

November 19, 2007

Regulation Coordination

A review of the literature from the National Sudden Infant Death Resource Center (NSIDRC), National Center for Education in Maternal & Child Health, Georgetown University

### **“Deaths and Injuries Attributed to Infant Crib Bumper Pads”**

**Thach BT, Rutherford GW Jr, Harris K. *Journal of Pediatrics*, Sep, 2007; 151(3): 271-274. [Accessed via ScienceDirect on 11/19/07]**

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**OBJECTIVE:** To document deaths attributed to bumper pads and injuries from their use that are potentially preventable. **STUDY DESIGN:** The US Consumer Product Safety Commission maintains files on cases voluntarily reported to them of deaths and injury related to commercial products. These cases represent an unknown fraction of total occurrences. We searched this database for deaths related to crib bumpers for the years 1985 to 2005. We also searched other Consumer Product Safety Commission databases for crib-related injuries that potentially might have been prevented by bumpers. Additionally, we examined 22 retail crib bumpers and described features that could be hazardous. **RESULTS:** Twenty-seven accidental deaths reported by medical examiners or coroners were attributed to bumper pads. The mechanism of death included suffocation and strangulation by bumper ties. Twenty-five nonfatal injuries were identified, and most consisted of minor contusions. All retail bumpers had hazardous properties. **CONCLUSIONS:** These findings suggest that crib and bassinet bumpers are dangerous. Their use prevents only minor injuries. Because bumpers can cause death, we conclude that they should not be used. **[abstract is from PubMed]**

### ***Editorial...***

**“And Things that Go Bump in the Night”: Nothing to Fear? Rachel Y. Moon MD. Goldberg Center for Community Pediatric Health, Children’s National Medical Center, Washington, DC. *Journal of Pediatrics*, Sep, 2007;151(3):237-238**

*[This editorial discusses the appeal of bumper pads, noting that: “crib bumper pads initially became popular as a means to protect infants from injury at a time when crib slats were spaced to permit wedging of the head between the slats... Nonetheless, 20 years after crib bumper pads were made obsolete by crib safety*

standards, they continue to be extremely popular. Anecdotal reports from my practice and from my perusal of parenting websites suggest that parents buy and continue to use crib bumper pads for 1 of 3 main reasons: (1) The infant likes to sleep with his or her head in the corner of the crib, and the bumper pads provide a soft surface; (2) the infant's extremities might become wedged between the slats or the infant will be bruised by bumping up against the crib; and (3) bumper pads look adorable and make the crib a "cozy" environment for the infant. . .

The use of crib bumper pads has recently become more controversial. The American Academy of Pediatrics (AAP) Task Force on Sudden Infant Death Syndrome (SIDS) has not made a recommendation about bumper pad use, except to recommend that bumper pads be "thin, firm, well-secured, and not pillow-like."<sup>1</sup> In contrast, the Canadian Paediatric Society and Health Canada issued recommendations in 2004 against using bumper pads, because of the concern that the softness could create a potential SIDS or suffocation risk for the infant.<sup>2</sup> . . .

Parents are very concerned about the potential for injury from the infant bumping up against the crib or getting an extremity wedged between crib slats. They should be reassured by the CPSC data that clearly show that infants suffer essentially no long-term injuries from contact with the crib slats themselves, making bumper pads unnecessary for infant safety. . . .

Another argument against crib bumper pads not mentioned by Thach et al is that they obscure visibility. Particularly now with the new emphasis on room-sharing without bed-sharing as the preferred sleeping arrangement for parents and their infants, improved visibility of the infant in the crib may provide an additional impetus to avoid bumper pads. . .

... Although it is true that a soft surface can help cushion a fall, we must continue to remind parents that when it comes to sleep time for their infants, soft and cozy do not equal safe."]

**Safety of bumper pads ("The Editors' Perspectives"), by Alan J. Jobe, MD, Ph.D.  
*Journal of Pediatrics*, Sep, 2007;151(3):237-238**

"As the Back to Sleep program has effectively decreased the incidence of SIDS, the residual causes of accidental deaths in infancy become more apparent. The recent discussions about the characteristics of bedding material, bed sharing and associations with smoking are examples of the scrutiny given to accidental deaths. In this issue of *The Journal*, Thach et al identify bumper pads used in cribs as another source of risk for injury and accidental death for infants. Their conclusions are based on the databases of the US Consumer Product Safety Commission, which depend on what gets reported. Thus, there is neither an accurate numerator for the actual number of attributable injuries and deaths nor a

denominator about frequency of use of bumper pads. Nevertheless, the probably low estimates do raise significant concerns that need to be recognized.”

**“The Changing Concept of Sudden Infant Death Syndrome: Diagnostic Coding Shifts, Controversies Regarding the Sleeping Environment, and New Variables to Consider in Reducing Risk.” Task Force on Sudden Infant Death Syndrome. *Pediatrics*; Nov2005, Vol. 116 Issue 5, p1245-1255.**

There has been a major decrease in the incidence of sudden infant death syndrome (SIDS) since the American Academy of Pediatrics (AAP) released its recommendation in 1992 that infants be placed down for sleep in a nonprone position. Although the SIDS rate continues to fall, some of the recent decrease of the last several years may be a result of coding shifts to other causes of unexpected infant deaths. Since the AAP published its last statement on SIDS in 2000, several issues have become relevant, including the significant risk of side sleeping position; the AAP no longer recognizes side sleeping as a reasonable alternative to fully supine sleeping. The AAP also stresses the need to avoid redundant soft bedding and soft objects in the infant's sleeping environment, the hazards of adults sleeping with an infant in the same bed, the SIDS risk reduction associated with having infants sleep in the same room as adults and with using pacifiers at the time of sleep, the importance of educating secondary caregivers and neonatology practitioners on the importance of "back to sleep," and strategies to reduce the incidence of positional plagiocephaly associated with supine positioning. This statement reviews the evidence associated with these and other SIDS-related issues and proposes new recommendations for further reducing SIDS risk. [Author abstract]

## Policy Statement

...”The recommendations outlined here were developed to reduce the risk of SIDS in the general population. As it is defined by epidemiologists, risk refers to the probability that an outcome will occur given the presence of a particular factor or set of factors. Scientifically identified associations between risk factors (eg, socioeconomic characteristics, behaviors, or environmental exposures) and outcomes such as SIDS do not necessarily denote causality. Furthermore, the best current working model of SIDS suggests that more than 1 scenario of preexisting conditions and initiating events may lead to SIDS. Therefore, when considering the recommendations in this report, it is fundamentally misguided to focus on a single risk factor or to attempt to quantify risk for an individual infant. Individual medical conditions may warrant a physician to recommend otherwise after weighing the relative risks and benefits. . .

1. Back to sleep: Infants should be placed for sleep in a supine position (wholly on the back) for every sleep. Side sleeping is not as safe as supine sleeping and is not advised.

2. Use a firm sleep surface: Soft materials or objects such as pillows, quilts, comforters, or sheepskins should not be placed under a sleeping infant. A firm crib mattress, covered by a sheet, is the recommended sleeping surface.

3. Keep soft objects and loose bedding out of the crib: Soft objects such as pillows, quilts, comforters, sheepskins, stuffed toys, and other soft objects should be kept out of an infant's sleeping environment. **If bumper pads are used in cribs, they should be thin, firm, well secured, and not "pillow-like."** In addition, loose bedding such as blankets and sheets may be hazardous. If blankets are to be used, they should be tucked in around the crib mattress so that the infant's face is less likely to become covered by bedding. One strategy is to make up the bedding so that the infant's feet are able to reach the foot of the crib (feet to foot), with the blankets tucked in around the crib mattress and reaching only to the level of the infant's chest. Another strategy is to use sleep clothing with no other covering over the infant or infant sleep sacks that are designed to keep the infant warm without the possible hazard of head covering."

**"Safe Bedding Practices for Infants, Cribs" TIPP (AAP's Injury Prevention Program):** <http://www.aap.org/family/inffurn.htm> [Accessed 11/19/07]

#### "SAFE BEDDING PRACTICES FOR INFANTS

\* Place baby on his or her back on a firm tight-fitting mattress in a crib that meets current safety standards.

\* Remove pillows, pillow-like bumper pads, quilts, comforters, sheepskins, stuffed toys, and other soft products from the crib."

**"Recommendations for safe sleeping environments for infants and children," issued by the Community Paediatrics Committee, Canadian Paediatric Society (CPS) Paediatrics & Child Health 2004; 9(9), 659-663**  
<http://www.cps.ca/English/statements/CP/cp04-02.htm> [Accessed 11/19/07]

"... Based on the available scientific evidence, the Canadian Paediatric Society recommends that for the first year of life, the safest place for babies to sleep is in their own crib, and in the parent's room for the first six months. However, the Canadian Paediatric Society also acknowledges that some parents will, nonetheless, choose to share a bed with their child. With these caveats in mind, the following recommendations are proposed with the understanding that no randomized studies can be performed to measure the potential impact of these

recommendations for a reduction in the incidence of any sudden unexpected infant death...”

The infant sleep environment must be free of quilts, comforters, bumper pads, pillows and pillow-like items. Dressing infants in sleepers should be considered to eliminate the need for any covers over the baby, other than a thin blanket.”

**Policy Statement for Bumper Pads. Health Canada, Consumer Product Safety.**  
[http://www.hc-sc.gc.ca/cps-spc/legislation/pol/bumper-bordure\\_e.html](http://www.hc-sc.gc.ca/cps-spc/legislation/pol/bumper-bordure_e.html) [Accessed 11/19/07]

...Conclusion:

“The use of bumper pads may expose young children to the hazards of entanglement, entrapment, strangulation, and suffocation.

Accordingly, it is the position of Health Canada that bumper pads compromise the safety of children with negligible perceived benefits. Therefore, Health Canada recommends that the Canadian public discontinue the use of these products. Bumper pads that continue to be bought and sold on the Canadian market should meet the minimum safety recommendations outlined in this policy.”

**SIDS Risk Reduction Language in State Licensing Regulations, from the National Resource Center for Health and Safety in Child Care (revised April 2007)**  
[http://nrc.uchsc.edu/RESOURCES/SIDS\\_in%20state\\_licensing\\_table1%20April%2007.pdf](http://nrc.uchsc.edu/RESOURCES/SIDS_in%20state_licensing_table1%20April%2007.pdf) [Accessed 11/19/07]

This table shows which states recommend “no soft bedding/materials” (although the language does not specify no “bumper pads”). The states that explicitly recommend against soft bedding/materials included the following (in table dated April 2007):

AL  
AK  
AZ  
CO  
DE  
GA  
IL  
ME  
MD  
MA  
MI

MT  
NJ  
OH  
OK  
SD  
TN  
TX  
VT  
VA  
WA  
WV  
WI

**ASTM ACTIVE STANDARD: ASTM F1917-00 Standard Consumer Safety Performance Specification for Infant Bedding and Related Accessories. West Conshohoken, PA: American Society for Testing and Materials, 2000.**

[http://www.astm.org/cgi-bin/SoftCart.exe/DATABASE.CART/REDLINE\\_PAGES/F1917.htm?E+mystore](http://www.astm.org/cgi-bin/SoftCart.exe/DATABASE.CART/REDLINE_PAGES/F1917.htm?E+mystore)

[Accessed 11/19/07]

**ASTM International (ASTM)** -- the international standards developing organization that develops and publishes voluntary technical standards for a wide range of materials, products, systems, and services -- provides guidelines and testing procedures for manufacturers of infant bedding, including bumper guards. Within the scope of the specification, this document explains:

“...BUMPER GUARDS should be secured in a crib as a customer would in actual end use situations. Ties should be tied and untied. While no specific requirements are defined here, the evaluator must perform enough testing to simulate normal use during the estimated lifetime of the product. The infant bedding product or related accessory shall be inspected after such tests and shall be evaluated according to the relevant requirements listed within this specification. . .”

**First Candle. Tips for Parents and Caregivers.**

[http://www.firstcandle.org/new\\_exp\\_parents/new\\_exp\\_tips.html](http://www.firstcandle.org/new_exp_parents/new_exp_tips.html). Revised

**December 2006.** [Accessed 11/19/07]

“Remove all soft bedding and other soft items from the crib when baby goes to sleep. This includes blankets, quilts, comforters, pillows and stuffed toys. Soft or

pillow-like bumper pads should not be used. If bumpers are used, they should be thin, firm and securely tied.”

**U.S. Consumer Product Safety Commission, *Safe Nursery, A booklet to help avoid injuries from nursery furniture and equipment* (CPSC publication #202)**

<http://www.cpsc.gov/cpsc/pub/pubs/202.pdf> [Accessed 11/19/07]

Cribs...

3. Bumper pads, if used, should (a) fit around the entire crib, (b) tie or snap into place, and (c) have straps or ties at least in each corner, in the middle of each long side, and on both the top and the bottom edges. To prevent your baby from becoming entangled in the ties, trim off excess length after tying. Use the bumpers until the baby can pull up to a standing position, then remove them so that the baby will not use them to try to climb out of the crib. 4. Remove and destroy all plastic wrapping materials. Never use plastic bags as mattress covers. The plastic film may cling to a baby's face and cause suffocation.

Also from Consumer Product Safety Commission:

**Soft Bedding May be Hazardous to Babies”**

<http://www.cpsc.gov/cpsc/pub/pubs/5049.html> [Accessed 11/19/07]

Safe Bedding Practices for Infants:

Remove pillows, quilts, comforters, sheepskins, pillow-like stuffed toys, and other soft products from the crib. [Note that this document includes a photograph of a baby in a crib that CLEARLY has no bumper pads in it.]

**Crib Safety Tips—Use your crib safely. Document #5030.**

<http://www.cpsc.gov/CPSCPUB/PUBS/5030.pdf> [Accessed 11/19/07]

“Do not put pillows, quilts, comforters, sheepskins, pillow-like bumper pads, or pillow-like stuffed toys in the crib.”

**Safe & Sound for Baby, Juvenile Products Manufacturers Association**

<http://www.jpma.org/index2.cfm?section=BabySafety> [Accessed 11/19/07]

“Full Size Cribs...

- \* No pillow-like bumpers.
- \* Look for the JPMA Certification Seal.

## Tips for Use

\* Use bumper pads only until the child can pull up to a standing position. Then remove them so baby cannot use the pads to climb out of the crib.”

**“Crib safety: Trade group departs from government recommendations”, March 2005. ConsumerReports.Org**

<http://www.consumerreports.org/cro/babies-kids/baby-toddler/nursery-furniture/cribs/crib-safety-305-crib-bumper-crib-toy/overview/index.htm?resultPageIndex=1&resultIndex=1&searchTerm=bumper%20pads> [Accessed 11/19/07]

*This online article (published in March 2005) states the following:*

“Juvenile Products Manufacturers Association (JPMA), a trade group, has launched a new publicity campaign suggesting that bedding and toys--the products its members make--pose no risk to babies after all, based on a new government review of crib deaths. “

## Bumper Pad Patents

**U.S. Trade & Patent Office.**

**Search page:** <http://www.uspto.gov/patft/index.html> [Accessed 11/19/07]

**Google Patents (beta) at <http://www.google.com/patents> [Accessed 11/19/07] is another source for information on “bumper pad” patents.**

[Various “bumper pad” patents claim to reduce the risk of injury to infants, whether allowing better air flow through the crib slats; redesigning potentially-hazards fasteners; or resizing or repositioning the pads. The U.S. Trade & Patent’s Office current U.S. Classification for “bumper pads” is: class 5, subclass 946 (as of November 12, 2007, a search using this classification number resulted in a searchable list of 35 patents for bumper pads. Other relevant classification numbers include 93.1 (cribs); 424 (safety devices); and 663 (rail or frame protecting devices).]

**Foundation for the Study of Infant Deaths (United Kingdom)**

**Save a Baby Month: May 2007, FSID’s baby sleep product advice tips for parents.**

<http://64.233.169.104/search?q=cache:aWetoX3o2IMJ:www.fsid.org.uk/editpics/451>

[1.pdf+%22foundation+for+the+study+of+infant+deaths%22+%2Bcot+bumpers&hl=en&ct=clnk&cd=5&gl=us](#) [Accessed 11/19/07]

“...Recent research has shown that cot bumpers have neither good nor bad effects. Take cot bumpers out when your baby can get up on their hands and knees so they can't climb out”

**SIDS Australia, “Making Up Baby’s Cot”**

<http://www.sidsandkids.org/cot.htm> [Accessed 11/19/07]

This downloadable tip sheet says that “Quilts, doonas, duvets, pillows, soft toys and cot bumpers in the cot are not recommended”

Note that translations for these guidelines are available in Arabic, Assyrian, Bosnian, Chinese, Khmer, Laotian, Spanish, and Vietnamese.

**Sudden Infant Death Syndrome Risks**

[http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Sudden\\_infant\\_death\\_syndrome\\_\(SIDS\)?OpenDocument](http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Sudden_infant_death_syndrome_(SIDS)?OpenDocument) [Accessed 11/19/07]

**Better Health Channel (“established in May 1999 by the Victorian (Australia) Government to provide quality-assured health and medical information for consumers”).**

“...Don't use cot bumpers”

**Safety Fact Sheet**

**Cot Bumpers and Pillows fact sheet**

**Kids Health, the Children’s Hospital at Westmead (Australia), 2005.**

[http://www.chw.edu.au/parents/kidshealth/safety\\_factsheets/pdf/cot\\_bumpers\\_and\\_pillows.pdf](http://www.chw.edu.au/parents/kidshealth/safety_factsheets/pdf/cot_bumpers_and_pillows.pdf) [Accessed 11/19/07]

**Description:**

Cot bumpers are pieces of padded fabric that attach to and line the inside of cots. Although they are designed to protect your baby from draughts and make the cot more attractive, cot bumpers pose significant hazards to babies. Children’s pillows come in a variety of shapes and sizes and may be filled with wool, feathers or synthetic material.

**Potential Hazards:**

**Choking**

Children may choke on strings, ribbons or buttons attached to cot bumpers.

**Falls**

Children may stand on cot bumpers to help them climb over the edge of the cot. This may lead to a fall.

#### Suffocation

Young children may suffocate if they roll face down onto a pillow or against a cot bumper.

#### Injuries:

While it is known that injury and death have occurred as a result of cot bumpers and pillows, there are no published statistics available.

#### Law or Australian Standard:

There are no laws or Australian Standards relating to cot bumpers and pillows. Please keep in mind the safety reminders below when considering the purchase and use of cot bumpers and pillows for children.

#### Remember:

The Children's Hospital at Westmead recommends that you do not use cot bumpers with your child. If you decide to use cot bumpers, purchase bumpers that do not have strings, ribbons or buttons that may pose a choking hazard. Always remove cot bumpers before putting your child to bed..."

