

**BEFORE THE  
U.S. CONSUMER PRODUCT SAFETY COMMISSION**



**PETITION REQUESTING A PERFORMANCE STANDARD TO DISTINGUISH  
AND REGULATE HAZARDOUS PILLOW-LIKE CRIB BUMPERS FROM NON  
HAZARDOUS TRADITIONAL CRIB BUMPERS  
UNDER SECTIONS 7 AND 9  
OF THE CONSUMER PRODUCT SAFETY ACT**

**May 9, 2012**

**INTRODUCTION**

The Juvenile Products Manufacturers Association (JPMA [www.jpma.org](http://www.jpma.org)) is a national trade organization representing 95% of the prenatal to preschool industry. JPMA continues to work with government officials, consumer groups, and industry leaders on programs to educate consumers on the safe selection and use of juvenile products. *Naptime to Nighttime* and Baby Safety Month are only a few of the programs JPMA sponsors to keep today's safety conscious parents informed.

**PETITION TO ESTABLISH A PERFORMANCE STANDARD FOR CRIB BUMPERS**

JPMA is petitioning the CPSC to adopt a rule to define and distinguish between hazardous "soft" pillow-like crib bumpers and traditional crib bumpers that can be distinguished from them.

The public will benefit from a clarifying standard. CPSC messaging has focused on restricting "soft" bedding from cribs for use with children under one (1) year of age. Despite information to the contrary related to the safety of traditional crib bumpers some groups altogether advocate for the elimination of such products from the marketplace. Ironically consumers and caregivers, with a long successful use of such products want such products and if unable to purchase safe products would more likely than not create makeshift products. Data from CPSC's own newly instituted [www.saferproducts.gov](http://www.saferproducts.gov) web site indicates that the predominant complaints relating to crib use involves entrapment, breaks, abrasions and contusions in crib slat openings (which are mandated as tightly limited pursuant to 16 CFR 1219 and ASTM 1169-10)<sup>1</sup>

JPMA is concerned that the elimination of crib bumpers from the marketplace will lead to unintended consequences and may encourage parents to use towels, adult blankets, pillows or other makeshift structures or materials as a protective barrier from the tight

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<sup>1</sup> Code of Federal Regulations Full-Size Baby Cribs and Non-Full Size Baby Cribs: Safety Standards, 2010 16 CFR 1219, sec. A.2 & G.4/ ASTM Standard Consumer Safety Specification for Full-Size Baby Cribs, F 1169-10, sec 5.8



dimensions and hard wooden surface of the crib slats. Data has demonstrated that caregivers have used unsafe alternatives in the sleeping environment to create a soft sleeping surface for babies or placed babies in altogether unsafe overly “soft” sleep environments. This behavior could occur with makeshift bedding used in the baby’s crib as well. This is highly risky behavior to be discouraged.

According to the CPSC data, limb entrapment is the number one cause of injury associated with cribs, accounting for over 12% of incidents reported, and adult (not juvenile) bedding products accounted for almost 78% of reported hazardous incidents involving “soft” bedding.<sup>2</sup> Various safe sleep advocacy groups, including the JPMA, continue to promote the need for information and education on safe sleep practices (see for example our cited “*Naptime to Nighttime*” program as well as our Web site [www.cribsafety.org](http://www.cribsafety.org)). Data demonstrates that the message is not reaching the child rearing population or perhaps is being ignored. As a result, we are concerned that any recommendations that results in the de facto elimination of safe and useful products specifically designed for infant use will result in alternative makeshift hazardous product or hazardous use of adult bedding in infant sleep environments. Experience in cities such as Milwaukee, Baltimore and Chicago suggests that this is a significant problem that needs to be addressed.

Part of this effort should include clear communications about safe sleep practices and clear distinguishing requirements that better delineate hazardous soft bedding from juvenile bedding that does not present a substantial hazard and provides utility and protection when used in the care of infants.

In an ongoing effort to create the safest products, crib bumper pad manufacturers have taken the lead in discussions to further enhance the existing ASTM voluntary standard for infant bedding. Currently balloted items include enhancements to the warning statements to ensure consumers are properly using and affixing bumper products in cribs and that they are affixed so as to allow secure positioning in the crib. The warnings also emphasize the proper fit and use of ties. This along with a new test method for tie strength will result in a stronger standard.

In addition, several manufacturers have supported enhanced retailer crib bumper pad requirements for the past several years including use of a firm filling material as well as a thickness standard for the bumper pad. An ASTM ballot recently passed to create a test method to measure the maximum thickness of 2” pre and post wash to ensure continuity of the test method. Several manufactures who sell to the largest juvenile product retailers are already meeting this requirement in the marketplace. A rule that provides a method to distinguish between appropriate and inappropriate products will greatly benefit the public and permit continued production, sale and use by consumers who desire to use safe, secure, traditional crib bumpers.

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<sup>2</sup> Howell, J, Edwards, P (2010) *Staff’s Draft Proposed Rules for Cribs. Full-Size and Non-Full-Size*. U.S. Consumer Product Safety Commission



In 2011, JPMA commissioned a third party review of previous studies of crib bumper pads by Exponent Failure Analysis, a leading engineering and scientific consulting firm providing solutions to complex technical issues. Based on the findings, claims of increased risk to infants from traditional crib bumper use were unfounded. The data and studies reviewed lead Exponent to note methodological problems that were apparent in the criteria used and that such data did not establish such hazards. A summary of this study is attached for Commission's Reference.<sup>3</sup> The available data and published scientific studies disclosed no primary proximate causation between use of traditional crib bumper pads and an increased risk of infant fatality. Finally, according to the Consumer Product Safety Commission (CPSC) the greatest risk is to an infant sleeping in a prone position or in a crowded sleep environment that includes pillows, cushions and adult bedding. The CPSC has indicated that in their review so far they have found no direct primary causal connection between crib bumpers and infant fatality.<sup>4</sup>

When used according to manufacturer's instructions, properly designed crib bumper pads can help prevent limb entrapment and head injuries. Product innovation will continue to result in a wide variety of traditional and alternative bumpers and crib rail liners on retail shelves. Parents should have a choice in determining the protection level they want to provide in their baby's cribs. JPMA strongly encourages the Commission to consider the desirability of policies that support consumer choice.

JPMA is supportive of safe sleep education and agrees with many of the updated recommendations that were outlined in the policy statement *SIDS and Other Sleep-Related Infant Deaths: Expansion of Recommendations for a Safe Infant Sleeping Environment* such as *back to sleep*, use of a firm sleep surface, room-sharing without bed-sharing, removing soft objects such as adult pillows, quilts, and comforters from cribs and other infant sleep environments.

The U.S. Consumer Products Safety Commission has, to date, found that there is **no evidence** of a primary casual connection between traditional crib bumpers and suffocation when the product is used as reasonably intended. JPMA supports an international ASTM safety standard that would require all crib bumpers sold or leased to meet certain dimensional, labeling and performance criteria. ASTM Standards currently include more than 12,000 safety standards set by ASTM, in use in 135 countries around the world.

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<sup>3</sup> Sala, J, Prange, M (2011) *Crib Bumpers and the Infant Sleep Environment: An Evaluation of the Scientific Evidence* Exponent Failure Analysis

<sup>4</sup> Wanna-Nakamura, S (2010) White Paper – *Unsafe Sleep Settings Hazards Associated with the Infant Sleep Environment and Unsafe Practices Used by Caregivers: A CPSC Staff Perspective*. U.S. Consumer Product Safety Commission; CPSC Chairman's Comments to JPMA meeting participants Washington D.C. 2011-12

**ASTM STANDARD PROPOSED PERFORMANCE REQUIREMENTS  
PROVIDE A REASONABLE BASIS FOR A MANDATORY CRIB  
BUMPER PERFORMANCE STANDARD**



In an ongoing effort to create the safest products, crib bumper pad manufacturers have taken the lead in discussions to further enhance the existing ASTM voluntary standard for infant bedding, including crib bumper pads. The following recommended changes to the existing bedding standard are either currently out to ballot with ASTM or have been previously approved by the subcommittee through the ASTM balloting process and are recommended as the basis for any federal requirements as follows. Additionally an ASTM Task Group is currently working on developing uniform instructional materials for incorporation into the Infant Bedding standard.

**Bumper Tie Test Method**

This test was developed to reduce the incidents of ties breaking away from the bumper pad.

The test method is as follows:

*Bumper Tie Strength* – Following the testing specified in the following section, a bumper pad tie shall not fully detach from the bumper pad. Partial detachment or tearing is allowed.

*Bumper Tie Attachment Strength:* Apply a tensile force of 20 lbs. on the bumper pad tie(s) in a perpendicular direction away from the attachment point of the ties to the bumper pad. The force shall be applied evenly within a period of 5 seconds, and maintained for an additional 10 seconds.

Bumper pad ties that share a common attachment shall be tested together, as if one tie.

Note: There is no single clamp or attachment means specified for the bumper pad tie attachment strength test. Any suitable means may be used to apply the force specified in section 6.x. The loading device shall be a self-indicating force gauge or other appropriate means having an accuracy of +/- 0.5 lbs. (+/- 2N)

**Bumper Pad Warnings**

*Suffocation Warning*

- The warning to reduce the risk of suffocation is to be placed first as the risk of suffocation is greater than the other issues stated in this section due to the bumper ties being shortened and falls due to climbing up on bumpers is not commonly an issue.
- Changing to “keep top of bumper up and in position” and “allow bumper to sag down or in” in place of “use this bumper if it sags” better describes the action necessary to avoid the suffocation risk. The word “sag” will be kept as it is a good descriptive term. “Down or in” is there to cover both the top sagging down and the bumper sliding into the sleep surface. DO NOT use bumper if sagging cannot be corrected.

*Strangulation Warning*



- “Entanglement” is being deleted as suffocation is the injury risk.
- The “DO NOT use this bumper...” statement is to be combined with the strangulation hazard statement as strangulation is the issue here as well and it reinforces the “securely attached” statement.

#### *Fall Warning*

- The addition of “To prevent injury from falls from climbing out” identifies the source of the risk and why the action communicated in the warning is required.

#### WARNING

To reduce the risk of suffocation, keep top of bumper up and in position, DO NOT allow bumper to sag down or in toward the sleeping surface.

- To prevent entanglement or strangulation, position ties outside of crib and be sure they are secure. DO NOT use this bumper if all ties cannot be securely attached to the crib.
- To prevent injury from falls from climbing out, remove bumper when child can sit up unaided or can pull to a standing position.

### **Bumper Thickness Standard**

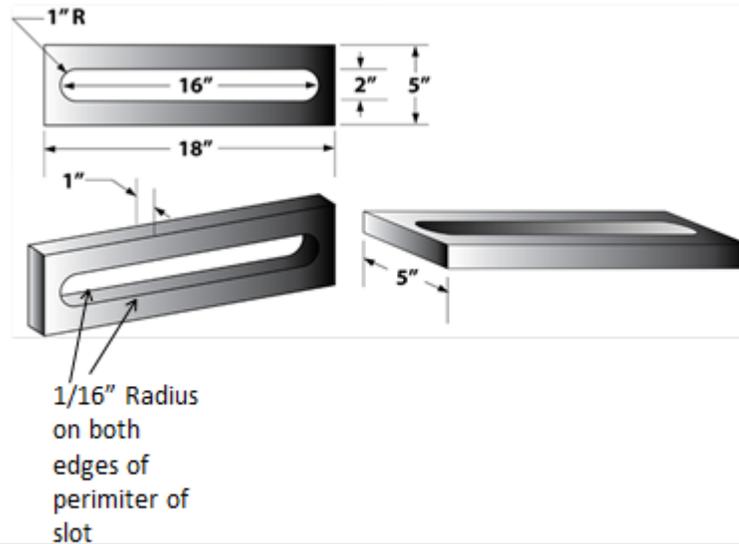
In order to define and eliminate “pillow-like” crib bumpers from the marketplace, the standard will include a test method to measure the thickness of the product. Many mass retailers have required their vendors to meet thickness requirements for the last two years so the vast majority of manufacturers are already meeting this requirement; however, a uniform method for testing to this requirement does not exist. ASTM is standardizing this method and will require that crib bumper pads meet a 2” pre- and post-wash requirement which will simulate a real world experience with this product.

3.1.7 *fabric, n*—any woven, knit, flexible material that is intended to be sewn together as an assembly. (Note: this fabric definition was modified from the Play Yard Standard F406)

6. X *Maximum Bumper Thickness* For crib bumpers manufactured of fabric and filled with a natural or man-made fibrous material, each bumper section shall slide through the Bumper Thickness Test Fixture over its entire length when tested in accordance with section 6.X. The bumper shall be tested in its pre-washed state and also after three wash/dry cycles performed according to the manufacturer’s care instructions.

7. X *Bumper Thickness Test* – Align the Bumper Thickness Test Fixture so that the surface of the fixture with the opening is horizontal. Insert a bumper end into the opening so that the bumper end protrudes just beyond the lower surface of the test fixture and attach a 5lb static weight to the midpoint of the protruding bumper end. Keeping the bumper positioned vertically, allow the weight to slowly draw the bumper through the opening. The entire length of the bumper must pass completely through the test fixture slot within 30 seconds of commencement of the test to achieve a passing result.

Note: If bumper ties or other localized means provided to secure the bumper to the crib interfere with the bumper sliding through the Bumper Thickness Test Fixture, ease the ties or fasteners through the fixture and then continue the test.



Note: Test fixture shall be fabricated from aluminum and have a smooth finish

FIG. X Bumper Thickness Test Fixture

#### X1. RATIONALE

X1.1 The intent of this requirement is to limit the maximum thickness of crib bumpers. The CPSC has stated that pillows in the infant's sleeping environment pose a potential suffocation hazard, and therefore bumpers that are "pillow-like" should also be regarded as potentially hazardous. Also, ASTM standards for maximum thickness exist for other padded items infants interact with such as play yard pads. The 2 inch opening of the Test Fixture limits the overall thickness of bumpers to a thickness that has not been known to present a hazard and allows for excessive fabric, fabric seams and bumper ties. The 5lb weight was selected as it was thought that this was a very small force that when applied would allow for bumpers to slide through the gauge during testing and compensate for any excessive fabric, fabric seams, and bumper ties.

#### CONCLUSION

**JPMA respectfully requests that the Commission commence rulemaking to establish a reasonable performance standard for crib bumpers that distinguish non hazardous traditional crib bumpers from hazardous pillow-like "soft" bedding.**

Sincerely,

A handwritten signature in black ink, appearing to read "MR DWYER", with a long horizontal stroke extending to the right.

Michael Dwyer, CAE  
Executive Director



*Cited & Other References*

Wanna-Nakamura, S. Letter to Frederick Locker. 2 Apr. 2004.

Medford, R. L. Letter to Bridget Reuter. 22 June 1999

Code of Federal Regulations Full-Size Baby Cribs and Non-Full Size Baby Cribs: Safety Standards, 2010 16 CFR 1219, sec. A.2 & G.4/ ASTM Standard Consumer Safety Specification for Full-Size Baby Cribs, F 1169-10, sec 5.8

Howell, J, Edwards, P (2010) *Staff's Draft Proposed Rules for Cribs. Full-Size and Non-Full-Size*. U.S. Consumer Product Safety Commission

Sala, J, Prange, M (2011) *Crib Bumpers and the Infant Sleep Environment: An Evaluation of the Scientific Evidence* Exponent Failure Analysis

Wanna-Nakamura, S (2010) White Paper – *Unsafe Sleep Settings Hazards Associated with the Infant Sleep Environment and Unsafe Practices Used by Caregivers: A CPSC Staff Perspective*. U.S. Consumer Product Safety Commission.

Naptime to Nighttime, (2011). [Brochure] JPMA



JUN 25 1999

U.S. CONSUMER PRODUCT SAFETY COMMISSION  
WASHINGTON, DC 20207

June 22, 1999

Ms. Bridget Reuter  
Assistant Director of Public Relations  
JPMA  
236 Route 38 West, Suite 100  
Moorestown, New Jersey 08057

Dear Ms. Reuter:

I am responding to your request for clarification regarding our safety alert on soft bedding. In the alert, CPSC, the American Academy of Pediatrics and the National Institute for Child Health and Human Development provided recommendations on safety bedding practices when placing infants to sleep.

In your letter, you asked for clarification of CPSC's position on the use of crib sheets, mattress pads, crib top sheets, wedges and positioning devices intended to keep the baby on its back, and light weight blankets, including receiving blankets. These are clarified in the bullet points below.

- Caregivers should use crib sheets that are designed to fit the crib mattress. A bottom-fitted crib sheet should fit securely at each corner so that it does not become loose, even after several washings. If using a top sheet, caregivers should place their baby with feet at the foot of the crib and tuck the sheet around the crib mattress, reaching only as far as the baby's chest.
- If caregivers use a light-weight or receiving blanket, the baby should be placed with feet to foot of crib with the blanket tucked in tightly around the crib mattress, reaching only as far as the baby's chest.
- If a mattress pad is used, it should be thin and designed to fit the crib mattress securely at each corner so it does not become loose.
- Various devices have been developed either to maintain sleep position or to reduce the risk of rebreathing. Staff does not believe that available information supports either the safety or efficacy of these products.

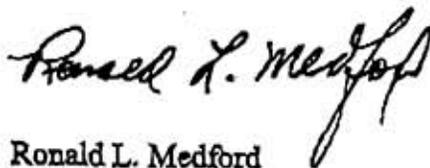
CPSC's position on the use of bumper pads may also need clarification. Because pillows in the infant's sleeping environment pose a potential suffocation hazard for infants, bumper pads that are "pillow-like" should also be regarded as potentially hazardous and should not be used. CPSC staff observed a number of different bumper pads that fit the "pillow-like" definition. In addition, if bumper pads are used they should:

- be removed when the baby can pull up to the standing position so that the baby will not use them to climb out of the crib;
- fit around the entire crib and tie or snap into place, and;
- 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. Any excess length should be trimmed off after tying to prevent an infant from becoming entangled in the ties.

In a CPSC study of deaths diagnosed as SIDS, we found that about 30% of the infants who died were found with their noses and mouths completely covered by soft bedding. Based on 3,000 SIDS deaths, staff estimated that as many as 900 deaths were associated with suffocation from soft bedding. Additionally, a number of research studies have found certain types of soft bedding to be a risk factor for SIDS.

I hope this clarifies the issues raised in your letter.

Sincerely,



Ronald L. Medford  
Assistant Executive Director  
Hazard Identification and Reduction



U.S. CONSUMER PRODUCT SAFETY COMMISSION  
WASHINGTON, DC 20207

Mr. Frederick Locker  
Locker, Greenberg & Brainin, P.C.  
420 Fifth Avenue  
New York, New York 10018

Dear Mr. Locker:

I have been asked to respond to your letter to Jacqueline Elder dated November 12, 2003 on the subject of suffocation and strangulation of infants with traditional infant bedding.\* You asked if we could review our data and advise you "if there are any suffocation or strangulation incidents directly related to the use of traditional crib bumper pads, infant blankets and stuffed toys in infant cribs (exclusive of SIDS diagnosis in cribs where such products may have been present)."

Following your inquiry, the Directorate for Epidemiology's Division of Hazard Analysis staff conducted a search of three databases maintained by CPSC: Injury and Potential Injury Incidents (IPII); In-Depth Investigations (INDP), and Death Certificates (DTHS)<sup>1</sup>. The searches retrieved a total of 94 infant death cases covering the period from 11/1/1995 to 12/31/2003. The deaths were attributed to suffocation/positional asphyxia and in one case strangulation. In most of the cases, the coroner/medical examiner/police reports listed bedding as a contributing factor in the infant's death.

CPSC's Health Sciences staff conducted a careful review of each of the above records and concluded that in 21 cases the association of bedding with the deaths appeared to be incidental and that other mitigating factors or products were more likely to have contributed to the deaths. In 38 cases, the available information was minimal and Health Sciences staff considered that no reliable conclusion could be drawn. In one case the medical examiner stated that the cause of death was due to hanging by a blanket, however the police detective stated that the victim lacked strangulation markings around the neck and no one had indicated that the blanket was found tightly wrapped around the victim's neck. In 34 of the cases the evidence of "death due to

\*The views expressed in this letter are those of the CPSC staff, have not been reviewed or approved by, and may not necessarily reflect the views of, the Commission.

<sup>1</sup> Codes and word searches used:

Bedding and bumper pads: 1537 bassinets and cradles, 1543 cribs, 1529 portable cribs, 1542 baby mattresses or pads, 1545 cribs not specified. Stuffed animals: 5004 toys not elsewhere classified, plus word searches using "stuff", "suffocation" and "asphyxia."

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suffocation on bedding" was stronger. These incidents involved cribs and other sleeping surfaces. In 30 of these cases the sleep environment was cluttered with adult sized blankets, quilts, and pillows. In 3 cases the infants were found face down in "soft bedding" and in one incident the infant was found face down in "infant bedding."

While there are four cases in which infants were found face down on "soft bedding or "infant bedding" there is no additional data detailing what that bedding was. In the one report where the medical examiner concluded that the death was due to strangulation from a blanket, there are conflicting reports from the police. Although bumper pads and stuffed toys were mentioned as being in the crib in some of the other deaths, there was insufficient detail to conclude that these were the causative agents in the infants' deaths.

Sincerely,



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# Naptime to Nighttime



Traditional infant products, when used properly, provide an infant with a safe environment in which to sleep. The Juvenile Products Manufacturers Association (JPMA) reminds you to follow these tips for safe infant sleep practices.



## Infant Bedding Safety

- To reduce the risk of SIDS, pediatricians recommend healthy infants be placed on their backs to sleep, unless otherwise advised by your physician.
- ALWAYS use a crib sheet that fits securely on mattress and wraps around the mattress corners.
- Only a tight fitted sheet, mattress pad and/or waterproof pad should be used under the baby.
- When using bumper pads avoid those that are pillow-like. Bumper pads must fit properly in your crib and tie or snap securely into place. Bumper ties MUST NOT exceed nine inches. Make sure the bumper pad can be secured along the sides of the crib.
- 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.
- Many bumpers are now sold in four pieces. For each bumper segment, if all ties on that segment cannot be securely attached to the crib DO NOT USE the bumper segment.
- NEVER place infants to sleep on pillows, sofa cushions, adult beds, waterbeds, beanbags, or any other surface not specifically designed for infant sleep.
- Remove pillows, sheepskins, pillow-like stuffed toys and products not intended as infant bedding from the crib when infants are sleeping. NEVER place additional padding under an infant.
- Do not overdress your baby. Consider using a sleeper, wearable blanket or other sleep clothing as an alternative to any covering.
- For newborns, consider swaddling.
- Check periodically for loose threads or stitching which could cause gagging or choking.



## Crib Safety

- The safest place for a baby to sleep is in a fully functional, properly assembled, JPMA Certified crib. Before you use a crib, check to make sure the crib has not been recalled.
- You should never purchase or use second hand cribs handed down from friends or family members as they may not meet the most current safety standards.
- Drop side cribs are no longer available for purchase; however if you are using a previously purchased drop-side crib, parents should ensure the drop side or any other moving part operates smoothly. Remember to ALWAYS secure the moveable side when baby is in the crib.
- Make sure there are no missing, loose or broken parts or improperly installed screws, brackets or other hardware on the crib or the mattress support. Check the stability and hardware on the crib often. Do not substitute hardware. Only use hardware obtained directly from the manufacturer.
- Always use a properly fitting mattress as infants can suffocate in gaps between a poorly fitting mattress and the crib sides or ends.
- Never leave items not intended for the crib hanging on the corner posts or sides of the crib. Babies can pull those items into the crib or become entangled in them.
- When your child is able to pull to a standing position, set the mattress to the lowest position and remove bumper pads, large toys and other objects that could serve as steps for climbing out. It's time to move your child to a toddler bed when he or she begins to climb out or reaches a height of 35 in.
- Never place the crib near windows where cords from blinds or drapes may strangle a child.
- Mobiles should be removed from the crib when baby can push up on hands and knees or pull up to a standing position.
- If using a baby monitor with cords, make sure all cords are out of arm's reach of your child. Never place any item in or on the crib that has cords, strings, etc. as babies can become entangled and strangle in these items.
- Do not put a baby monitor in the crib, bassinet, or toddler bed.

