CONSUMER PRODUCT SAFETY COMMISSION

16 CFR Parts 1219 and 1220

Safety Standards for Full-Size Baby Cribs and Non-Full-Size Baby Cribs; Final Rule

AGENCY: Consumer Product Safety Commission.

ACTION: Final rule.

SUMMARY: Section 104(b) of the Consumer Product Safety Improvement Act of 2008 ("CPSIA") requires the United States Consumer Product Safety Commission ("CPSC," "Commission," or "we") to promulgate consumer product safety standards for durable infant or toddler products. These standards are to be "substantially the same as" applicable voluntary standards or more stringent than the voluntary standard if the Commission concludes that more stringent requirements would further reduce the risk of injury associated with the product. The Commission is issuing safety standards for full-size and non-full-size baby cribs in response to the direction under section 104(b) of the CPSIA.\(^1\) Section 104(c) of the CPSIA specifies that the crib standards will cover used as well as new

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\(^1\) The Commission voted 5-0 to approve publication of this final rule. Chairman Inez M. Tenenbaum, Commissioner Thomas H. Moore, Commissioner Robert S. Adler, and Commissioner Anne M. Northup filed statements concerning this action which may be viewed on the Commission’s web site at http://www.cpsc.gov/pr/statements.html or obtained from the Commission’s Office of the Secretary.
cribs. The crib standards will apply to anyone who manufactures, distributes, or contracts to sell a crib; to child care facilities, family child care homes, and others holding themselves out to be knowledgeable about cribs; to anyone who leases, sublets, or otherwise places a crib in the stream of commerce; and to owners and operators of places of public accommodation affecting commerce.

DATES: **Effective Date:** The rule will become effective on [insert date 6 months after date of publication in the FEDERAL REGISTER]. The incorporation by reference of the publications listed in this rule is approved by the Director of the Federal Register as of [insert date 6 months after date of publication in the FEDERAL REGISTER].

**Compliance Dates:** Compliance with this rule with respect to the offer or provision for use of cribs by child care facilities, family child care homes, and places of public accommodation affecting commerce is required starting on [insert date 24 months after date of publication in the FEDERAL REGISTER]. For all other entities subject to the rule, compliance with this rule is required starting on [insert date 6 months after date of publication in the FEDERAL REGISTER].

**FOR FURTHER INFORMATION CONTACT:** Christopher Melchert, Office of Compliance and Field Operations, Consumer Product
A. Background and Statutory Authority

1. Section 104(b) of the Consumer Product Safety Improvement Act

The Consumer Product Safety Improvement Act of 2008 ("CPSIA", Pub. Law 110-314) was enacted on August 14, 2008. Section 104(b) of the CPSIA requires the Commission to promulgate consumer product safety standards for durable infant or toddler products. The law requires that these standards are to be "substantially the same as" applicable voluntary standards or more stringent than the voluntary standards if the Commission concludes that more stringent requirements would further reduce the risk of injury associated with the product. The Commission is issuing safety standards for full-size and non-full-size cribs that are substantially the same as voluntary standards developed by ASTM International (formerly known as the American Society for Testing and Materials). The standard for full-size cribs is substantially the same as a voluntary standard developed by ASTM, ASTM F 1169-10, Standard Consumer Safety Specification for Full-Size Baby Cribs, but with two modifications that strengthen the standard. The
standard for non-full-size cribs is substantially the same as ASTM F 406-10a, Standard Consumer Safety Specification for Non-Full-Size Baby Cribs/Play Yards, but with four modifications that strengthen the standard.

2. Section 104(c) of the CPSIA and the Proposed Rule

The crib standards are different from standards for the other durable infant or toddler products that section 104 of the CPSIA directs the Commission to issue. Section 104(c)(1) of the CPSIA makes it a prohibited act under section 19(a)(1) of the Consumer Product Safety Act ("CPSA") for any person to whom section 104(c) of the CPSIA applies to "manufacture, sell, contract to sell or resell, lease, sublet, offer, provide for use, or otherwise place in the stream of commerce a crib that is not in compliance with a standard promulgated under subsection (b) [of the CPSIA]." Section 104(c)(3) of the CPSIA defines "crib" as including new and used cribs, full-size and non-full-size cribs, portable cribs, and crib pens.

Section 104(c)(2) of the CPSIA states that the section applies to any person that:

(A) manufactures, distributes in commerce, or contracts to sell cribs;
(B) based on the person’s occupation, holds itself out as having knowledge or skill peculiar to cribs, including child care facilities and family child care homes;
(C) is in the business of contracting to sell or resell, lease, sublet, or otherwise place cribs in the stream of commerce; or

(D) owns or operates a place of public accommodation affecting commerce (as defined in section 4 of the Federal Fire Prevention and Control Act of 1974 (15 U.S.C. 2203) applied without regard to the phrase "not owned by the Federal Government").

Section 104(c)(2) of the CPSIA.

Thus, the crib standards apply to owners and operators of child care facilities, family child care homes, and places of public accommodation such as hotels and motels, as well as to manufacturers, distributors, and retailers of cribs. Other durable infant or toddler product standards issued under section 104 of the CPSIA apply to products manufactured or imported on or after the effective date of the standard. However, under section 104(c) of the CPSIA, after the applicable date of compliance, it will be unlawful for any of the entities identified in section 104(c)(2) of the CPSIA to sell, lease, or otherwise distribute or provide a crib for use that does not meet the new CPSC crib standards, regardless of the date on which the crib was manufactured.

In the Federal Register of July 23, 2010 (75 FR 43308), the Commission published a proposed rule that would establish standards for full-size and non-full-size cribs.

3. Previous Commission Crib Standards (16 CFR parts 1508 and 1509)

The Commission first issued mandatory regulations for full-size cribs in 1973 (amended in 1982), which were codified at 16 CFR part 1508 under the Federal Hazardous Substances Act ("FHSA"). In 1976, the Commission issued similar regulations for non-full-size cribs (also amended in 1982), which were codified at 16 CFR part 1509. The requirements of 16 CFR parts 1508 and 1509 have been included in ASTM F 1169-10 and F 406-10a, respectively. However, the recordkeeping requirements in the ASTM standards are expanded from the 3-year retention period that was required in 16 CFR parts 1508 and 1509 to a 6-year retention period, which is consistent with the consumer registration provision in section 104(d) of the CPSIA.

Elsewhere in this issue of the Federal Register, we are revoking the CPSC regulations for full-size and non-full-size cribs at 16 CFR parts 1508 and 1509. The new
crib standards in this final rule, which incorporate the applicable ASTM standards, include the requirements of 16 CFR parts 1508 and 1509. Revoking 16 CFR parts 1508 and 1509 will allow all the crib-related requirements to be together and will avoid confusion about which requirements apply to cribs.

4. Previous Commission Activities Concerning Cribs

As detailed in the preamble to the proposed rule (75 FR at 43309), we have taken numerous regulatory and nonregulatory actions concerning crib hazards. In 1996, the Commission published an advance notice of proposed rulemaking ("ANPR") under the FHSA to address the hazard of crib slat disengagement, 61 FR 65996 (Dec. 16, 1996). When the Commission proposed the new crib standards under section 104 of the CPSIA, it published a notice terminating the rulemaking it had begun with the 1996 ANPR because the slat disengagement hazard is addressed by the new standards that the Commission is issuing. 75 FR 43107 (July 23, 2010).

The Commission’s Office of Compliance has been involved with numerous investigations and recalls of cribs. Since 2007, the CPSC has issued 46 recalls of more than 11 million cribs. All but seven of these recalls were for
product defects that created a substantial product hazard, and not for violations of the federal crib regulations.

Other previous actions include: (1) an ANPR that the Commission published in the Federal Register on November 25, 2008 (73 FR 71570) in preparation for this rulemaking, which discussed options to address the hazards that CPSC staff had identified in the reported crib incidents and recalls; and (2) a public roundtable meeting concerning crib safety that CPSC staff held on April 22, 2009. Information about the crib roundtable and the presentations made by CPSC staff and others are on the Commission’s website at http://www.cpsc.gov/info/cribs/infantsleep.html.

B. The Products and Their Market

1. Definitions under the CPSIA and the Crib Standards

The Commission’s previous crib standards in 16 CFR 1508 and 1509 contained definitions of “full-size crib” and “non-full-size crib.” According to 16 CFR parts 1508 and 1509, what principally distinguishes full-size cribs from non-full-size cribs are the interior dimensions of the crib. Also, according to these standards, a full-size crib is intended for use in the home, and a non-full-size crib is intended for use “in or around the home, for travel and other purposes.” A full-size crib has interior dimensions of 28 ± ½ inches (71 ± 1.6 centimeters) in width.
by 52 3/8 ± 3/8 inches (133 ± 1.6 centimeters) in length. A non-full-size crib may be either smaller or larger than these dimensions. Full-size and non-full-size cribs also differ in the height of the crib side or rail. Non-full-size cribs include oversized, specialty, undersized, and portable cribs. However, any products with mesh/net/screen siding, non-rigidly constructed cribs, cradles, car beds, baby baskets, and bassinets are excluded from the non-full-size crib requirements of 16 CFR part 1509.

Essentially, these definitions are carried over to the new crib standards with some important differences due to section 104(c) of the CPSIA. Because section 104(c) of the CPSIA explicitly includes used cribs in the definition of "crib," the definitions of full-size and non-full-size crib in the CPSC standards also include used cribs. The definition of "full-size crib" in part 1508 was limited to cribs "intended for use in the home." However, section 104(c) of the CPSIA explicitly includes full-size and non-full-size cribs in child care facilities (including family child care homes) and cribs in places of public accommodation affecting commerce. The CPSIA defines a "place of public accommodation affecting commerce" with reference to the Federal Fire Prevention and Control Act of 1974 (but without the phrase that excludes establishments
owned by the Federal Government). Thus, the CPSIA defines "places of public accommodation," as:

any inn, hotel, or other establishment ... that provides lodging to transient guests, except that such term does not include an establishment treated as an apartment building for purposes of any State or local law or regulation or an establishment located within a building that contains not more than 5 rooms for rent or hire and that is actually occupied as a residence by the proprietor of such establishment.


Therefore, the definitions of full-size and non-full-size crib in the CPSC standards include new and used cribs, cribs in child care facilities, family child care homes, and cribs in places of public accommodation.

2. Full-Size Cribs

A full-size crib has specific interior dimensions of 28 ± ½ inches (71 ± 1.6 centimeters) in width and 52 ¾ ± ½ inches (133 ± 1.6 centimeters) in length and is designed to provide sleeping accommodations for an infant.

CPSC staff estimates that there are currently 68 manufacturers or importers supplying full-size cribs to the U.S. market. Ten of these firms are domestic importers (15 percent); 42 are domestic manufacturers (62 percent); 7 are foreign manufacturers (10 percent); and 2 are foreign
importers (3 percent). Insufficient information was available about the remaining firms to categorize them.

Based on information from a 2005 survey conducted by the American Baby Group, CPSC staff estimates annual sales of new cribs to be about 2.4 million, of which approximately 2.1 million are full-size cribs. (This number could be an underestimate if new mothers buy more than one crib.) CPSC staff estimates that there are currently approximately 591 models of full-size cribs compared to approximately 81 models of non-full-size cribs. Thus, approximately 88 percent of crib models are full-size cribs.

3. Non-Full-Size Cribs

A non-full-size crib may be either smaller or larger than a full-size crib, or shaped differently that the usual rectangular crib. The category of non-full-size cribs includes oversized, specialty, undersized, and portable cribs, but does not include any product with mesh/net/screen siding, non-rigidly constructed cribs, cradles, car beds, baby baskets, or bassinets. The CPSC standard for non-full-size cribs does not apply to play yards, which are mesh or fabric-sided products.

CPSC staff estimates that there currently are at least 17 manufacturers or importers supplying non-full-size cribs.
to the U.S. market. Five of these firms are domestic importers and 10 are domestic manufacturers. Insufficient information is available to determine whether the remaining firms are manufacturers or importers. CPSC staff estimates that there are approximately 2.4 million cribs sold to households annually. Of these, approximately 293,000 are non-full-size cribs.

4. Retailers, Child Care Facilities, and Places of Public Accommodation

CPSC staff is unable to estimate the number of retailers that may sell or provide cribs. We can estimate, however, that there are approximately 24,985 retail firms in the United States (at least 5,292 of which sell used products). The number of retailers that sell or provide cribs would be some subset of that number.

CPSC staff estimates that there are approximately 59,555 firms supplying child care services. We received comments from child care organizations about the cribs they use. According to these comments, the average child care center has between 4 and 45 cribs, so, assuming that the number of firms supplying child care services is the same as child care centers discussed in the comments, child care centers could have roughly 774,180 cribs total. We estimate that there are approximately 43,303 firms
providing public accommodation. We did not receive any comments from such firms and cannot estimate how many cribs may be in use in places of public accommodation.

C. Incident Data

The preamble to the proposed rule (74 FR at 43310 through 43311) provided detailed information concerning incident data based on information from the CPSC's Early Warning System ("EWS"), a pilot project to monitor incident reports related to cribs and other infant sleep products. We summarize important aspects of the incident data in this section, but refer interested parties to the preamble to the proposed rule for more complete details. Data from EWS is not meant to provide an estimate of all crib-related incidents that have occurred during any particular time period. We used the EWS data for this rulemaking because, due to the larger number of follow-up investigations assigned from EWS incident reports, the EWS incidents provided the best illustration of the hazard patterns associated with incidents involving cribs.

Between November 1, 2007 and April 11, 2010, the Commission received reports through EWS of 3,584 incidents related to cribs. The year of the incident associated with these reports ranged from 1986 through 2010. However, very
few crib-related incidents that occurred before 2007 are reflected in the EWS.

Of the 3,584 incidents reported through the EWS, CPSC staff identified 2,395 incidents as clearly involving full-size cribs; 64 incidents as clearly involving non-full-size cribs; and 1,125 incidents as lacking sufficient data for CPSC staff to determine whether they involved full-size or non-full-size cribs. The prevalent hazards reported in these incidents are common to all cribs, regardless of size. Given the predominance of incident reports identified as involving full-size cribs, the 1,125 incidents in which the size of the crib could not be determined are grouped with the category of full-size cribs.

1. Full-Size Cribs (Includes Cribs of Undetermined Size)

This section discusses incident data in the 3,520 reports from the EWS involving full-size cribs and cribs of an undetermined size. Of these 3,520 incident reports, there were 147 fatalities, 1,675 nonfatal injuries, and 1,698 noninjury incidents. (The noninjury incidents range from those that potentially could have resulted in injuries or fatalities to general complaints or comments from consumers). Because reporting is ongoing, the number of
reported fatalities, nonfatal injuries, and non-injury incidents presented here may change in the future.

a. Fatalities

Between November 1, 2007 and April 11, 2010, a total of 147 fatalities associated with full-size (and undetermined size) cribs were reported to the Commission. A majority of the deaths (107 out of 147, or almost 73 percent) were not related to any structural failure or design flaw of the crib. There were 35 fatalities attributable to structural problems of the crib. Nearly all (34 of the 35) were due to head/neck/body entrapments. More than half of these (18 out of 35) were related to drop-side failures. Almost all of the crib failures—whether they occurred due to detachments, disengagements, or breakages—created openings in which the infant became entrapped.

b. Nonfatal Injuries

Of the 3,520 incident reports involving full-size (and undetermined size) cribs, 1,675 reported a crib-related injury. The vast majority (97 percent) of these injuries were not serious enough to require hospitalization. Approximately half of those that did require hospitalization involved limb or skull fractures and other head injuries resulting from falls from cribs. Most of the
remaining injuries resulted from children getting their limbs caught between crib slats, falling inside the crib and hitting the crib structure, or getting stuck in gaps created by structural failures.

c. Hazard Pattern Identification

CPSC staff considered all 3,520 incidents (includes fatalities, nonfatalities, and non-injury incidents) involving full-size cribs (including cribs of undetermined size) to identify hazard patterns related to these incidents. CPSC staff grouped these incidents into four broad categories: (1) Product-related; (2) non-product-related; (3) recall-related; and (4) miscellaneous. More detail is provided in the Epidemiology staff’s memorandum that was part of the CPSC staff’s briefing package for the proposed rule, available on the CPSC website at: http://www.cpsc.gov/library/foia/foia10/brief/104cribs.pdf.

Approximately 82 percent of the 3,520 incidents reported some sort of failure or defect in the product itself. In order of frequency, the hazard patterns reported included:

- falls from cribs (approximately 23 percent of the 3,520 incidents);
• crib drop-side-related problems (approximately 22 percent of the incidents and about 12 percent of all reported fatalities);

• infants getting their limbs caught between the crib slats (approximately 12 percent of the incidents);

• wood-related issues, such as slat breakages and detachments (approximately 12 percent of the incidents);

• mattress support-related problems (approximately 5 percent of the incidents);

• mattress fit problems (approximately 3 percent of the incidents);

• paint-related issues (approximately 2 percent of the EWS incidents); and

• miscellaneous problems with the crib structure (approximately 3 percent of incidents), including non-drop-side or drop gate failures, sharp catch-points, stability and/or other structural issues.

2. Non-Full-Size Cribs

This category includes portable cribs and other cribs that are either smaller or larger than the dimensions specified for full-size cribs. For its review of incident data, CPSC staff included in the category of non-full-size
cribs only those cribs that it could positively identify as non-full-size cribs. CPSC staff is aware of 64 incidents related to non-full-size cribs that have been reported between November 1, 2007 and April 11, 2010. Among these incidents, there were 6 fatalities, 28 injuries, and 30 noninjury incidents. Because reporting is ongoing, the number of reported fatalities, nonfatal injuries, and noninjury incidents presented here may change in the future.

a. Fatalities

Of the six fatalities, three were attributed to the presence of a cushion/pillow in the sleep area. One fatality was due to the prone positioning of the infant on the sleep surface. One fatality resulted from the infant getting entrapped in a gap opened up by loose/missing screws. Very little information was available on the circumstances of the last fatality.

b. Nonfatal Injuries

Among the 28 nonfatal injuries reported, only 2 required any hospitalization. Most of the remaining injuries, which include fractures, bruises, and lacerations, resulted from children falling and hitting the crib structure while in the crib, falling or climbing out
of the crib, and children getting their limbs caught in the crib slats.

c. Hazard Pattern Identification

CPSC staff considered all 64 incidents (including fatalities, nonfatalities, and non-injury incidents) involving non-full-size cribs to identify hazard patterns related to these incidents. The hazard patterns are similar to those among full-size cribs. In 72 percent of the incidents, product-related issues were reported. These primarily involved falls from cribs, limbs becoming caught between slats, issues related to drop-sides and non-drop-sides (such as detachments and operation/hardware issues), and wood-related issues (including three slat detachments). This category includes one fatality, which was related to non-drop-side hardware.

D. Voluntary and International Standards

As discussed in the preamble to the proposed rule (75 FR at 43311 through 43312), CPSC staff reviewed requirements of existing voluntary and international standards related to cribs. The primary standards currently in effect are the ASTM standards for full-size and non-full-size cribs, a Canadian standard, and a European standard. Underwriters Laboratories, Inc. ("UL") has a crib standard, UL 2275. However, the UL standard was
not followed by crib manufacturers and is no longer an active standard.

1. The ASTM Standards

ASTM first published its voluntary standard for full-size cribs, ASTM F 1169, *Standard Specification for Full-Size Baby Crib*, in 1988, and has revised it periodically since then. In 2009, ASTM revised the standard significantly, including a limitation on movable sides that effectively eliminates the traditional drop-side design in which the front side of the crib can be raised and lowered. On June 1, 2010, ASTM approved the current version of its full-size crib standard with a slight change to the name, ASTM F 1169-10, *Standard Consumer Safety Specification for Full-Size Baby Cribs*.

version of its non-full-size crib standard, ASTM F 406-10, upon which the CPSC’s proposed standard was based. After we published our proposed rule in the Federal Register on July 23, 2010, ASTM revised its non-full-size crib standard again and approved ASTM F 406-10a on October 15, 2010. ASTM F 406-10a includes many of the changes which the proposed rule would have made to ASTM F 406-10, rearranges the order of some provisions, and contains some other editorial changes. Consequently, the final rule’s non-full-size cribs standard is based on ASTM F 406-10a. We discuss differences between the proposed rule and ASTM F 406-10a in section F of this preamble.

2. International Standards

Several performance requirements in the crib standards derive from, or are similar to, requirements in Health Canada’s crib standard, SOR/86-969, and the European standard, EN 716. These include the cyclic side (shake) test and the mattress support system vertical impact test from the Canadian standard, and the slat/spindle strength test from EN 716 requirements. (For more details on how the crib standards are based upon or are more stringent than certain international standards, we refer interested parties to the preamble to the proposed rule (75 FR at 43312).)
E. Response to Comments on the Proposed Rule

In the Federal Register of July 23, 2010 (75 FR 43308), the Commission published a proposed rule that would establish standards for full-size and non-full-size cribs. We received over 50 comments. These included comments from child care organizations, the Juvenile Products Manufacturers Association ("JPMA"), public interest groups, and individual consumers. The comments and the CPSC's responses are discussed below in section E.1 through E.31 of this document. To make it easier to identify comments and our responses, the word "Comment," in parentheses, will appear before the comment's description, and the word "Response," in parentheses, will appear before our response. We also have numbered each comment to help distinguish between different comments. The number assigned to each comment is purely for organizational purposes and does not signify the comment's value, importance, or the order in which it was received.

1. Misplaced Focus on Drop-Sides

(Comment 1) - One commenter stated that focusing on drop-side cribs was misplaced. Rather, she suggested, new crib standards should focus on the structure and hardware of cribs.
(Response 1) - The CPSC agrees that the safety of the drop-side is just one issue and other issues, especially cribs' structural integrity and hardware, are crucial to crib safety. Although the prohibition of traditional drop-side cribs has received a great deal of attention, the CPSC's new crib standards have numerous provisions, particularly concerning crib hardware, which will improve the safety of cribs. See the discussion of the standards' requirements in section G of this preamble.

2. Applicability of Standards to Cribs in Child Care Centers

(Comment 2) - Several commenters associated with child care organizations or child care centers said that the crib standards should not apply to cribs in child care centers. They gave reasons such as: caregivers are present at all times when babies are in cribs at child care centers; cribs in child care centers are specialty cribs that do not have the same safety issues as home cribs; and state licensing and safety requirements safeguard babies in cribs in child care centers. Some commenters stated that the crib standards are unique because, unlike other standards that hold product manufacturers or distributors responsible, the crib standards hold child care centers (which are consumers
buying the cribs from these manufacturers and distributors) responsible.

(Response 2) - Section 104(c)(1) of the CPSIA states that it "shall be a violation of section 19(a)(1) of the Consumer Product Safety Act for any person to which this subsection applies to manufacture, sell, contract to sell or resell, lease, sublet, offer, provide for use, or otherwise place in the stream of commerce a crib that is not in compliance with a standard promulgated under" section 104(b) of the CPSIA. Section 104(c)(2) of the CPSIA identifies various entities that are subject to section 104(c) of the CPSIA, and it expressly mentions persons who "based on the person's occupation, holds itself out as having knowledge or skill peculiar to cribs, including child care facilities and family child care homes." The fact that a child care center may be subject to state regulation and licensing, or that caregivers at such facilities may be required to supervise babies in cribs, does not alter the applicability of section 104(c) of the CPSIA to child care facilities and family child care homes.

As for the commenter's claim that cribs in child care centers are different from those used in homes, the information that the CPSC has indicates that cribs used in
child care centers are often substantially the same as cribs used in homes. CPSC staff has reports of incidents involving cribs in child care centers; the hazard scenarios associated with these incidents are the same as those for incidents that occur in homes.

3. Waiving Requirements for Child Care Centers

(Comment 3) - One commenter suggested waiving any requirement to replace cribs in child care and Head Start programs that comply with state licensing or national accreditation requirements, which mandate that all sleeping infants be within sight or sound of a caregiver at all times; and another commenter suggested a waiver of enforcement for cribs that are used in child care programs that comply with state licensing standards that require sleeping infants to be within sight and sound of a caregiver at all times. Some commenters asked that older cribs in child care centers be exempted from the rule (or allowed an enforcement waiver), as long as the cribs had not been recalled, thus shifting the burden of replacement from child care centers to manufacturers.

(Response 3) - We do not have the authority to exempt or waive requirements for cribs in child care centers or to allow older cribs to be replaced through recalls alone. As discussed in response to comments concerning the effective
date at section G.10 of this document, we do have
discretion to provide additional time for child care
centers to come into compliance with the standards.

4. Crib-Related Incidents in Child Care Centers

(Comment 4) - One commenter recognized that there have
been injuries and fatalities associated with drop-side
cribs, but stated that banning drop-side cribs in child
care settings would not address this threat to young
children. The commenter stated that, because of the safety
checks on cribs and monitoring of sleeping children in
child care centers, issues with drop-side cribs do not
occur in such programs as they might in other settings.

(Response 4) - As stated in our response to comment 2
in section E.2 of this document, section 104(c) of the
CPSIA expressly mentions child care facilities and family
child care homes as entities subject to the crib standards.
The statute does not authorize us to consider safety
checks, or the monitoring of sleeping children in child
care facilities, or the rate at which safety issues might
arise, or to exempt child care facilities for such reasons.

Additionally, our review of the incident data reported
to the CPSC from November 1, 2007 through April 11, 2010,
shows that at least two reports of incidents in child care
facilities were received. Each report involved the
structural failure of multiple drop-side cribs. Although no injuries were reported in these incidents, they presented the potential for serious injury or fatality.

(Comment 5) - Some comments noted that sleeping infants are not left unsupervised in drop-side or other types of cribs in child care centers and noted further that children in child care centers are in cribs only when they are sleeping.

(Response 5) - The CPSC has received at least 11 reports of injuries involving cribs in child care facilities, in which the injured infant was treated in a hospital emergency department. These injuries, usually due to a fall from a crib or an impact with the crib, were sustained while the infant was being taken care of at a child care facility. Clearly, the infants were not sleeping if the injuries were due to infants falling or impacting the crib.

5. Commercial vs. Noncommercial Cribs

(Comment 6) - Several commenters suggested that the crib standards should distinguish between "commercial" and "noncommercial" cribs. One commenter asked if there should be different crib standards for child care providers or other nonfamily situations, where cribs sustain more use, similar to the distinction between home and public
playground equipment (the CPSC has separate guidelines for home and public playground equipment).

(Response 6) - Section 104 of the CPSIA does not make a distinction between commercial and noncommercial cribs but, rather, requires that all cribs within the scope of section 104(c) of the CPSIA—which explicitly includes cribs provided for use in child care centers and places of public accommodation—meet the crib standards promulgated by the Commission under section 104(b) of the CPSIA. Although ASTM has a voluntary standard applicable to "commercial cribs" (ASTM F 2710-08), section 104 of the CPSIA does not make such a delineation. Furthermore, ASTM's commercial crib standard requires commercial cribs to comply with either ASTM F 406 or ASTM F 1169, and this final rule adopts, with some modifications, both ASTM F 406 and ASTM F 1169. In its crib rulemaking, the Commission is following the specific statutory direction and definitions in the CPSIA. In contrast, when developing guidelines for public and home playgrounds, the Commission was not responding to a statutory mandate, and thus, it had the discretion to distinguish between public and home playground equipment.

6. Mesh/Nonrigid Full-Size Cribs

(Comment 7) - One commenter suggested that the full-size crib standard should apply to rigid cribs only, and
not be applicable to full-size cribs that have sides or ends made from mesh, fabric, or another nonrigid material. The commenter referred to the scope of the proposed non-full-size crib standard, which is limited to rigid products only.

(Response 7) - We are not aware of any full-size mesh/fabric cribs currently being sold. In contrast, there are numerous non-full-size mesh/fabric cribs (i.e., play yards) currently on the market. The CPSC agrees that for non-full-size products, different requirements for rigid versus mesh products are necessary because the construction differences may make it impossible to test both the same way. The ASTM standard for non-full-size cribs includes both rigid and mesh/fabric non-full-size cribs. Although there are requirements in the ASTM standard specifically intended for mesh/fabric products, the scope of the CPSC’s standard for non-full-size cribs is limited to rigid products because section 104 of the CPSIA explicitly lists cribs and play yards as separate categories of products. Therefore, we plan to develop a separate standard for mesh/fabric non-full-size cribs (i.e., play yards). Currently, there is no voluntary standard or proposed regulation specifically for mesh/fabric full-size cribs. However, the CPSC’s standard for full-size cribs contains
general, labeling, and some performance requirements that would be applicable to any full-size crib, whether it has rigid or mesh/fabric sides. Thus, excluding these products from the scope of the CPSC’s full-size crib standard, as suggested by the commenter, would leave such cribs unregulated. Absent a voluntary standard that covers mesh/fabric full-size cribs, it is not advisable to exclude these products from the scope of a full-size crib regulation.

7. Play Yards

(Comment 8) - Some commenters were concerned that the rule might result in child care centers or consumers using play yards instead of cribs. These commenters implied that play yards are not as safe as cribs for sleeping infants. One commenter, who is child care provider, stated that she uses only play yards, not cribs.

(Response 8) - The final rule does not address any safety aspects of play yards. Play yards are a separate product category under section 104 of the CPSIA, and we intend to develop a separate standard for play yards in the future.

(Comment 9) - Two commenters expressed concern about using play yards as an alternative to cribs in day care centers as a way of mitigating costs to child care
providers. Both felt that this alternative might be perceived as advocating the use of play yards, which they felt would decrease the safety and quality of care. Some commenters noted that play yards are not an option for some child care centers due to state licensing laws.

(Response 9) – Although the CPSC does not advocate the use of play yards instead of cribs in child care environments, issues regarding the possible use of play yards or other products (in place of cribs) and state laws are outside the scope of this rulemaking. This final rule establishes standards for full-size and non-full-size cribs.

8. Economic Impact of CPSC’s Crib Standards on Child Care Centers

(Comment 10) – Several commenters expressed concern that the proposed rule, if finalized, would place a large financial burden on child care centers, particularly given the tight budgets and lethargic economy. One commenter estimated that the total one-time cost to day care centers to replace their cribs could be as much as $600 million, with an additional $2.5 million required for disassembly, disposal, and assembly. The same commenter noted that the preamble to the proposed rule concluded that “the proposed changes to the voluntary standard should not significantly
affect replacement costs” (75 FR at 43319). Generally, commenters objected to purchasing new cribs to replace recently-purchased cribs that had no safety issues. Several commenters were concerned that some child care centers might be driven out of business.

(Response 10) - We recognize the potentially large impact the crib standards could have on child care providers. The Regulatory Flexibility Act discussion in the preamble to the proposed rule invited comment on the market for cribs and the amount of time manufacturers would need to meet current market demand and additional demand created by child care centers and other places where cribs are provided for use (75 FR at 43316). It also discussed the possible impact on small child care centers and stated that the impact “could be significant on some small child care centers if they had to replace their cribs all at once” and that some might decide to replace their non-full-size cribs with play yards (Id. at 43318). The initial regulatory flexibility analysis in the briefing package for the proposed rule assumed that most, if not all, child care centers use smaller, non-full-size cribs; thus, staff did not expect a significant impact associated with full-size cribs. (See Tabs F and G of the staff’s briefing package on the proposed rule at:
In the initial regulatory flexibility analyses, all of the effects on child care centers were considered in the analysis for non-full-size cribs.

We have modified our Regulatory Flexibility Act discussion in the final rule. CPSC staff’s analysis using data provided by the Early Care and Education Consortium (ECEC), the National Association for Family Child Care (NAFCC), and the National Head Start Association (NHSA), yields one-time replacement costs of approximately $387 million. The discussion also has been modified to take into account specifically the possibility that child care centers might go out of business, as well as the impact of the final rule on families using child care.

(Comment 11) - Several commenters expressed concern about the ability of child care providers to pass on costs to their clients to reduce the economic impact of the final rule. These commenters stated that they felt the analysis in the preamble to the proposal did not appreciate child care centers' limited ability to pass on such costs. The commenters noted that most of their clients are struggling already to pay for child care. (The price range for child care cited by one commenter was from $4,550 to more than $18,000 per year.) The commenters added that most child
care centers only have a few customers, so their ability to raise large sums of money by increasing the cost to clients to defray the cost of replacement cribs is limited.

(Response 11) - The Regulatory Flexibility Act discussion in the preamble to the proposed rule did not suggest that all cost increases associated with the proposed rule would be passed on to consumers, only that some portion of those costs might be passed on, thereby mitigating the impact of the proposed rule on small child care centers (see 75 FR at 43318). We recognize that the economic impact on any given entity may vary, depending on a variety of factors, such as the size of the affected entity, the presence or absence of competitors that may affect an entity’s ability to raise prices or pass along costs to its customers, and the types of cribs purchased and an affected entity’s ability to comply with the standards.

(Comment 12) - One commenter stated that, despite the high quality of the cribs used at its child care center and a lack of incidents there, the child care center had been informed that its cribs do not meet the proposed standard. The commenter expressed concern that “the standards could be eliminating a company that produces extremely high quality materials and is very safety conscious.”
(Response 12) - The final rule may have the effect of eliminating particular crib models from the marketplace. However, these crib models likely will be replaced by modified versions that comply with the new standards. The final rule is unlikely to drive many manufacturers out of business, particularly those with otherwise high quality cribs that may require only minimal design modifications to come into compliance with the new standards. This is especially the case with manufacturers that supply many products other than just cribs to the market, including the company mentioned in the comment.

9. Fixing or Retrofitting Cribs

(Comment 13) - Three commenters (all of whom were child care providers) requested that the CPSC provide methods of checking whether their current cribs would meet the new standards. They also requested that the final rule include descriptions of how to fix cribs that fail a particular requirement (i.e., retrofit), as a way to limit the number of new cribs that must be purchased. These comments mentioned retrofits to handle drop-side cribs in particular.

(Response 13) - Section 104(c) of the CPSIA requires child care centers to provide cribs that comply with the new crib standards once they are in effect. The standards
not only prohibit traditional drop-sides, but they also have complex requirements, such as those for hardware, that make it difficult to determine whether an existing crib would meet the new standards without testing that individual crib. Because the crib would be destroyed in the process of testing, it is impossible to test each crib. Therefore, we cannot provide methods to check existing cribs for compliance with the CPSC’s new crib standards. We also note that retrofits that would be appropriate for a recall might not be sufficient to meet the requirements of the new standards. For example, manufacturers have offered immobilizers in the past to address drop-side hazards on recalled cribs. This retrofit would not be sufficient to meet the crib standards. An immobilizer merely covers up part of the drop-side hardware and makes the drop-side unusable while in place, but it would not prevent a user from removing the retrofit and using the drop-side again.

10. Effective Date/Enforcement Policy

(Comment 14) - Most commenters supported the proposed six-month effective date for manufacturers and distributors of cribs, except one commenter requested (without providing any explanation or support) one to two years for manufacturers and distributors of non-full-size cribs. Many commenters, however, requested a longer effective date
for child care centers to allow them to spread the costs of compliance over a longer period of time and to ensure that there are a sufficient number of compliant cribs available for purchase. Most of these commenters suggested an additional six months for cribs in child care centers, and two commenters suggested a five-year effective date for child care centers.

(Response 14) - We recognize that complying with the new crib standards may place a significant financial burden on child care centers. Nevertheless, section 104(c) of the CPSIA requires that child care centers provide cribs for use that meet the CPSC’s new crib standards when these standards are in effect. The Commission recognizes that child care facilities face unique circumstances. Collectively, child care centers purchase and provide for use hundreds of thousands of cribs. Having a sufficient number of cribs is essential to their business because, if they provide care for infants, they cannot operate without providing cribs for their customers’ use.

Based on a 2005 U.S. Department of Education’s National Household Education Surveys Program (“NHES”) Early Childhood Program Survey, approximately 774,000 children under the age of one year old are in nonparental, nonrelative child care arrangements each week. We
understand from commenters that the typical life cycle of a crib used in a child care center is 10 years. Thus, we estimate that, in any given year, child care providers replace approximately 77,000 cribs. Assuming that one crib must be provided for each child under the age of one, at least 700,000 cribs—ten times more than the annual average—would be needed to replace noncompliant cribs when the new standards take effect. This demand would be added to the demand of private households for new compliant cribs and any cribs replaced by the 53,000 places of public accommodation covered by section 104 of the CPSIA.

The Commission has the discretion to set the effective date for the crib standards, and could set an effective date longer than six months for all entities that are subject to the standards, or could provide a longer period just for child care centers to comply with the new crib standards. Balancing all of the concerns expressed by the commenters, the final rule provides an additional 18 months for child care facilities, family child care homes, and places of public accommodation to comply with the new standards.

(Comment 15) - One commenter suggested that we establish an enforcement policy that would allow "a practical phased effective date for hospitality and
commercial facilities" (the latter being interpreted by the commenter as including child care providers) and distinguish between commercial- and noncommercial-use products.

(Response 15) - Section 104(c) of the CPSIA does not distinguish between commercial and noncommercial cribs and does require cribs in child care centers and places of public accommodation to comply with the new crib regulations. As discussed in the previous response, the Commission has discretion to set effective and compliance dates for the new standards.

Although the Commission received numerous comments from child care centers concerning their difficulties with meeting the new crib standards within six months, we did not receive any comments from hotels or similar places of public accommodation indicating the need for additional time to obtain complying cribs for such establishments. We did receive one comment from JPMA requesting additional time for "hospitality and commercial facilities," noting that the need for these entities to "dispose of their inventories of non-compliant product and repurchase all new replacement products ... will place a tremendous financial burden on those facilities, requiring an enormous capital investment as a result of the wholesale changes to
inventory.” Although child care commenters provided detailed information about the number of cribs in child care centers, the normal rate of replacement, and the anticipated costs of complying with the new crib standards, we did not receive such information concerning places of public accommodation. However, places of public accommodation are similarly situated to child care centers in that they must purchase cribs and then provide them for their customers to use and will likely face the same difficulties as child care centers in complying with the new crib standard in a short period of time. Therefore, the Commission is providing a longer compliance period for places of public accommodation as well as child care centers.

11. Effect on Places of Public Accommodation

(Comment 16) - Two commenters, neither of which were places of public accommodation nor did they represent places of public accommodation, expressed concern about the potential cost impact on places of public accommodation.

(Response 16) - The CPSC believes that while some providers of public accommodation may provide a few cribs for use by customers, the number of non-full-size cribs at any one establishment is likely to be low. Firms may opt to reduce the impact of the rule by ceasing to provide
cribs to their customers, not replacing all of their cribs, or providing play yards instead. Therefore, it is unlikely that the crib standards will have a significant impact on a substantial number of firms providing public accommodation. However, we have to expect that some portion of the more than 53,000 place of public accommodation covered by the Act that provide cribs for their customers will replace their cribs to be in compliance with this rule. There could be as many as 160,000 cribs that might need to be replaced. As explained in the previous response, places of public accommodation and child care centers are similarly situated in some respects, and therefore, the Commission is providing a longer compliance period for places of public accommodation as well as child care facilities, and family child care homes.

12. Expiration Date/Definition of Useful Life of Crib

(Comment 17) - One commenter asked whether cribs should have an expiration date, given that many of the identified hazards appear to result from prolonged use. The same commenter asked how one would define the useful life of a crib. For example, would it be defined in terms of the product's age in years, or, how often it had been used? The commenter also asked how the disassembly and
reassembly of a crib would be considered, and what effect this would have on the crib's components and hardware.

(Response 17) - It would be extremely difficult to include a definition of useful life or to require that manufacturers provide an expiration date for cribs. As recognized by the commenter, the condition of a crib, including the security of components and hardware, can be affected by use. Moreover, each family uses a crib differently, depending on the activity level of each child, the length of time each child uses the crib, and the frequency of disassembling and reassembling the crib. Manufacturing differences and variations in materials among cribs, also might affect a crib's useful life. Thus, even keeping the use conditions identical, two different cribs likely will show wear and tear at varied rates.

13. Crib Mattress Standards/Regulations

(Comment 18) - Some commenters expressed satisfaction that ASTM has begun developing a separate safety standard for mattress fit, and they stated their expectation that the CPSC would mandate the voluntary ASTM standard when it is finalized. One comment, submitted on behalf of several organizations and individuals, expressed concern about health and environmental risks that the commenters believed could be associated with the use of certain flame
retardants or other potentially harmful chemical agents in the manufacture of crib mattresses. It suggested that the CPSC "ensure that a standard or regulation for crib mattresses address both health and environmental risks that potential hazardous chemicals could pose to infants."

(Response 18) - We already have regulations pertaining to the flammability of mattresses, mattress pads, and mattress sets (see 16 CFR parts 1632 and 1633). Issues regarding flame retardants and other chemicals that may be applied to mattresses are beyond the scope of this rulemaking.


(Comment 19) - One commenter suggested that the CPSC use international standards, or the relevant parts of them, as a basis for our regulation. These include the relevant international standards or technical regulations, such as the Health Canada, EN (European Nation), or ISO (International Standards Organization) crib standards.

(Response 19) CPSC staff has reviewed, compared, and considered a variety of crib standards/regulations, including the three identified by the commenter. In addition, CPSC staff reviewed the Australian/New Zealand crib standard and three voluntary standards, one published by Underwriters Laboratories (which is no longer an active
standard), and the two ASTM standards. The CPSIA specifically requires the Commission to promulgate a safety standard that is substantially the same as, or more stringent than, any voluntary standards. The Commission chose the appropriate ASTM voluntary standards for cribs to be the basis for the CPSC's crib regulations.

CPSC staff's review of the international standards or regulations identified vast differences. Thus, assuming that the commenter sought internationally harmonized requirements, even if we were to adopt an international standard or regulation, the differences in the international standards and regulations would not have resulted in harmonization across multiple jurisdictions. The ASTM voluntary standard recently adopted one requirement (the slat/spindle strength requirement) that was based on a similar requirement in the EN standard and two requirements (the cycle test and the mattress support impact test) that are almost identical to ones found in the Health Canada regulation. Other requirements in the ASTM standards are equivalent to requirements in some of the other international regulations.

Regardless, section 104(b) of the CPSIA requires us to promulgate regulations that are substantially the same as voluntary standards or more stringent than such voluntary
standards if we determine that the more stringent standards would further reduce the risk of injury associated with durable nursery products. Section 104(b) of the CPSIA does not mention international harmonization of standards. We believe that the ASTM standards, with the specified modifications, are the most encompassing and robust crib standards and are thus "more stringent" than the ASTM standards alone.

15. Concern about Continually Replacing Cribs

(Comment 20) - Some commenters, consisting of child care centers, expressed concern that they would need to replace their stock of cribs every time that ASTM changes its full-size or non-full-size crib standards.

(Response 20) - Neither the CPSIA nor the CPSC's crib standards would require replacement of cribs whenever ASTM revises F 406 or F 1169. The CPSIA does require that all cribs that are manufactured, offered for sale, provided for use, or otherwise placed in the stream of commerce meet the crib standards issued by the CPSC. The CPSC's proposed crib standards reference ASTM F 406-10a and ASTM F 1169-10; however, the federal standards do not change automatically whenever ASTM revises its voluntary standards. Rather, to change the federal crib standards, we would need to engage
in notice and comment rulemaking procedures and refer to a subsequent version of the ASTM standards.

16. Continued Use of Cribs by Consumers

(Comment 21) - One commenter suggested that we include in an Enforcement Policy a clarification that consumers can continue to use cribs that conform to ASTM standards in effect in 2010.

(Response 21) - We intend to distribute information and education materials in connection with issuance of the crib standards and will consider such a clarification as part of those materials. Nothing in the CPSIA, or in the crib standards, requires consumers to replace their cribs with cribs that comply with the new crib standards. The CPSIA requires action by those who manufacture, sell, lease, or otherwise distribute cribs in commerce, and by child care centers and places of public accommodation.

17. Miscellaneous Clarifications about Use of Certain Cribs/Play Yards

(Comment 22) - A few commenters asked for clarification or made incorrect interpretations of the proposed rule or the CPSIA. These comments mostly dealt with the requirements as they would apply to child care centers. One commenter asked if she would no longer be able to use wooden cribs or play yards. Another commenter
incorrectly understood that consumers would be required to replace their cribs, and she objected to this.

(Response 22) - The CPSIA and the crib standards do not dictate the kind of sleeping environment—full-size crib, non-full-size crib, or play yard—that a child care center must provide. Further, the crib standards do not dictate the type of material from which a crib must be made (e.g., wooden, metal, or plastic). The CPSIA does require that any rigid crib, whatever it is made of, comply with either the full-size or non-full-size crib standard. Finally, nothing in the CPSIA, or in CPSC’s crib standards, would require consumers to replace their cribs with cribs that comply with the new crib standards.

18. Testing by Firewalled Labs

(Comment 23) - Several consumer groups suggested that the Commission not accept any “firewalled labs” to do testing for compliance with the crib standards because cribs “should meet the highest safety standards.”

(Response 23) - Section 102(a)(2) of the CPSIA generally requires that manufacturers and private labelers of children’s products (such as cribs) that are subject to a children’s product safety rule submit samples of their products for testing by a third party for compliance to applicable children’s product safety rules. Section
102(f)(2)(D) of the CPSIA allows the Commission to accredit a third party conformity assessment body (often referred to as a "testing laboratory" or "lab") that is owned, managed, or controlled by a manufacturer or private labeler as a third party testing lab if it meets certain requirements. Such testing labs are known as "firewalled" labs. If a firewalled lab meets the necessary requirements, its testing should be equivalent to testing conducted by any other third party testing lab. Thus, section 102 of the CPSIA does not prohibit the use of firewalled labs.

19. Formaldehyde Standards for Wood Products Act

(Comment 24) - One commenter stated that composite woods used in cribs should comply with the Formaldehyde Standards for Wood Products Act (P.L. No. 111-199) and that the CPSC should require that all cribs using composite wood be tested for compliance to these standards.

(Response 24) - The Formaldehyde Standards for Wood Products Act was enacted on July 7, 2010. It amends the Toxic Substances Control Act and establishes formaldehyde emission standards for hardwood, plywood, medium density fiberboard, and particle board that is sold, supplied, offered for sale, or manufactured in the United States. (The Act provides numerous exemptions from these standards.) The standards are to be administered by the
U.S. Environmental Protection Agency (EPA). The law makes no specific mention of cribs. However, it appears that if cribs are made of the types of wood subject to this law, the formaldehyde emission standards would apply to them. If manufacturers have questions about the applicability of the emission standards to their cribs, they should contact the EPA.

20. Soft Bedding

(Comment 25) - One commenter supported the proposed crib standards and suggested that the Commission also look into regulating soft infant bedding products, such as bumper pads.

(Response 25) - As noted in the staff’s briefing package that accompanied the proposed rule, extra bedding in cribs accounted for the majority of infant deaths in cribs or other sleeping products, but there are no performance requirements for cribs that can address this issue. (See page 12 of CPSC staff’s briefing package for the proposed rule at: http://www.cpsc.gov/library/foia/foia10/brief/104cribs.pdf.) Education and information may be a more appropriate way to address the hazards associated with extra bedding. For instance, the recently released CPSC video on safe sleeping,
is an example of an educational tool designed to bring more awareness to new parents of the dangers of extra or soft bedding.

21. Slat Strength Test Changes for Folding Crib Sides

(Comment 26) - One commenter noted that the spindle/slat testing procedure does not consider testing crib sides that fold either for access to the occupant or for storage and transport and that, as written in the proposed standard, the test method does not specify testing procedures for such segmented sides. The commenter suggested adding the following language for the full-size and non-full-size crib standards: "For cribs incorporating folding or moveable sides for purposes of easier access to the occupant, storage and/or transport, each side segment (portion of side separated by hinges for folding) shall be tested separately as described above."

(Response 26) - CPSC staff worked in cooperation with the ASTM task group, which created the language suggested by the commenter, to address this issue. Although the defined testing requirements in the proposed rule would work adequately for a crib side with no moving segments, it would not define clearly testing procedures for segmented sides. The intent of the slat strength test is to verify
that the crib slats can withstand 80 lbf. If a crib side includes a hinge or other folding mechanism, the force applied to the slat could be transferred to the hinge and unintentionally test the structural integrity of the hinge and/or hinge attachment. We have not received reports of any incidents regarding crib sides with hinges or other folding mechanisms. The final rule includes new provisions in both the full-size and non-full-size crib standards, based on the language provided by the commenter, to clarify the spindle/slat testing procedure for cribs with folding or movable sides.

22. Definition of Folding vs. Movable Sides

(Comment 27) - One commenter asked about the difference between movable sides and folding sides as defined in the voluntary full-size crib standard, ASTM F 1169-10.

(Response 27) - ASTM F 1169-10 defines a folding side as a side or part of a side that folds or pivots in order to provide easier access to an occupant. An example of this is a crib with a drop-gate design, where the top portion of one side folds over by use of a hinge or hinges. A movable side is also a side that is used to provide easier access to an occupant and is any design other than a folding side.
23. Rocking Crib Test Procedure

(Comment 28) - One commenter asked how we plan to apply the proposed crib standard to cribs that are built with rockers, a design that is not addressed explicitly by ASTM F 1169-10. The commenter noted that such a product could be a "super-sized" cradle or rocking bassinet, whose interior dimensions meet that of a full-size crib, or perhaps a glider-style crib. The commenter stated that it would make sense for the crib to be arrested during testing so that the crib does not rock, but the commenter felt that this was not clear in the proposed rule.

(Response 28) - We find that the current language in the standard is sufficient and clearly states that, for each dynamic test requirement, the crib must be mounted rigidly prohibiting or arresting any movement of the crib during all phases of the test procedure. Furthermore, it would be intuitive for test laboratories that a rocking crib must be secured to arrest any motion in the vertical or horizontal direction. Manufacturers and test labs have been manufacturing and testing non-full-size rocking cribs for some time now, and we are not aware of any clarity requested or needed for testing existing non-full-size rocking cribs or potentially newly-designed full-size rocking cribs.
24. ASTM Provision Concerning Retightening Screws and Bolts

(Comment 29) - Numerous commenters supported the proposed rule's exclusion of the provision in ASTM F 1169-10 concerning retightening of screws between tests, noting that it will enhance crib safety. One commenter, however, disagreed with exclusion of the hardware retightening provision. The commenter stated that the dynamic tests, namely the shake test, vertical mattress support impact test, and the crib side rail impact test are designed to simulate and accelerate the use and abuse of the crib. The commenter noted that, "absent test data to support a contrary position, tightening of the screws is consistent with the ASTM requirements and CPSC's own historic test practices." One commenter stated that CPSC staff has not had the time to evaluate the efficacy of not removing the retightening allowance.

(Response 29) - We strongly disagree with the commenter opposing exclusion of the hardware retightening provision. It is true that the purpose of accelerated life cycle tests is to accelerate the degradation rate of a product under known use conditions. However, the accelerated tests that are required in both the full-size and non-full-size crib standards are not overly stringent.
The combination of the shake test (to simulate a child standing and shaking the top of a side rail), the vertical mattress support impact test (child jumping), the crib side rail impact test (child climbing outside of rail), and the slat/spindle strength test (child and/or sibling falling against or kicking slats) comprise a laboratory simulation of a lifetime of use. The shake test parameters are based on a lifetime of use of only 18 months, or use by just one child. The majority of cribs are used for two and three children, and some are in use for 15 years or longer. Furthermore, the accelerated life cycle tests include test parameters for foreseeable use of the product. Foreseeable use includes a child shaking the side rails, jumping on the mattress, climbing on the outside of the side rails, or falling or kicking the crib slats.

As for the commenter's statement that CPSC staff has not had the time to evaluate the efficacy of not removing the retightening allowance, we disagree. First, we conducted initial tests to verify the effects of the vertical mattress support impact and crib side rail impact tests on fasteners loosened during the cyclic side shake test. We intentionally backed out fasteners one-quarter and one-half turn, chosen at random on three full-size and two non-full-size cribs, prior to mattress support and side
impact testing. In summary, the side rail impact test severely affected fasteners that lost their seated preload, approximately one-half turn and greater. Fasteners that were loosened less than one-half turn maintained sufficient preload to withstand the side impact test vibrations applied to the lower rail. If the fasteners that loosened after the crib side impact test had been retightened beforehand, a potentially dangerous condition, such as a hazardous gap created by loosened hardware, would have gone unnoticed.

Second, we recently had the opportunity to evaluate each proposed performance requirement by participating in the testing of a full-size crib according to the full-size crib standard. Test results showed that the forces exerted on the crib sides during the shake test are not significantly detrimental to loosening hardware. After completion of the shake test on the test crib, two fasteners were noted to have backed out, one about one-eighth of a turn, and one close to one-half a turn. Neither fastener backed out enough to be considered noncompliant with the test requirement. In addition, these two fasteners did not back off any further after the mattress support and crib side impact testing. However, after the crib side impact test, another fastener, a wing
nut securing the mattress support, backed off several
turns, creating about a three millimeter separation, which
is noncompliant with the requirement. Therefore, the crib
ultimately failed due to a primary component attached by a
screw that separated more than one millimeter. It is
important to note that the assembly envelope around the
wing nuts was confined severely by the proximity of the
mattress support frame to the side slats. This made it
difficult to ensure that adequate torque was applied during
crib assembly. Results such as these reemphasize the
importance of not allowing retightening of fasteners during
testing, because it is foreseeable that a consumer will
have similar difficulty tightening a fastener in a confined
space.

It is also important to note that ASTM F 1196-10 and F
406-10a include a new hardware and fasteners requirement,
which requires that crib hardware include a locking device
or method for impeding loosening. This will reduce further
the need for the retightening allowance, especially with
crib designs that utilize fasteners that are difficult to
access.

In summary, we strongly disagree with the request to
allow retightening of fasteners. The majority of crib side
rail corners are attached with one screw. Loosening just
one screw can result in subsequent detachment of the side rail corner, creating a hazardous gap. There have been at least 10 fatalities where loose screws have contributed to the death of a child. After drop-sides, loose screws are the second highest cause of fatalities associated with the structural integrity of cribs. It is important that fasteners remain secure during the useful life of the crib.

25. Captive Hardware

(Comment 30) - Some commenters suggested that the hardware used for assembly remain captive in the key structural components when a crib is disassembled to reduce the chance of losing the hardware and of owners subsequently substituting inappropriate hardware for the hardware that was provided originally with the crib.

(Response 30) - Captive hardware typically includes a threaded insert with a captive screw on the mating component. A few of the advantages of captive hardware include: prevention of lost hardware, accurate and repeatable assembly of primary structural components, and ease of assembly. Crib designs using captive hardware, especially for primary components, such as side rails, could minimize the chance of screws loosening, allowing components to detach and create an entrapment hazard. In addition, captive hardware could: (1) make assembly of
cribs easier; (2) minimize the chance of a consumer replacing a lost screw with an incorrect or improper substitute; and (3) reduce the chance of a consumer misassembling the crib.

Although, there appear to be many advantages to using captive hardware on cribs, there are several disadvantages as well. First, if a captive screw ever becomes damaged or is inadvertently bent or pulled from an external force while in the disassembled state, it may be difficult or impossible to reassemble the crib component with the damaged screw or to remove and reinstall a replacement captive screw. Second, requiring captive hardware to attach a mattress support could result in more complicated designs or extra hardware because one main component of a full-size crib, the mattress support, typically is designed to be installed in different positions (levels).

Although the advantages of using captive hardware may seem to outweigh the disadvantages, we conclude that it is premature to mandate the use of captive hardware. We encourage manufacturers and ASTM to investigate the use of captive hardware systems on cribs and note that some manufacturers already are employing or considering using such designs.
26. Test Mattress for Non-Full-Size Crib Mattress

Support Test

(Comment 31) - One commenter expressed concern about the requirement for non-full-size cribs to conduct the mattress support testing (dynamic impact) with a specific test mattress for each product, as opposed to conducting this test with the mattress supplied with each crib. The commenter was concerned that testing with such a mattress may be less stringent than testing with the mattress supplied with the product. The commenter also was concerned that the provision could require test labs to have multiple test mattresses to suit all different dimensions of non-full-size cribs. This, the commenter stated, could increase the time and costs of testing.

The commenter recommended using the mattress supplied with the product in the dynamic testing. Alternatively, the commenter suggested: (1) stating in the final rule that a test mattress be large enough to accommodate the impactor to be used in the test, provided the test mattress does not shift in any way during testing or (2) specifying a smaller test mattress that would accommodate all non-full-size cribs currently for sale in commerce, with such dimensions as 18" x 18" x 3."
In some instances, it may be true that testing non-full-size cribs with a thicker test mattress may be less stringent than testing with the mattress supplied with the product. However, we feel it is more important to use a standard size test mattress for test repeatability between testing facilities. Crib mattresses, especially mattresses provided with non-full-size cribs, are typically entry-level price point mattresses. Foam and mattress stitch variability is inherently high throughout the mattress industry. Furthermore, the mattress thickness, foam density, and other mattress characteristics determine the amount of energy that is transferred to the mattress support system. If a standard test mattress is not required, it is foreseeable that the same non-full-size crib with a supplied one-inch mattress may pass at one test laboratory, but fail at another, due solely to the inherent variability in the mattress manufacturing process.

As for the commenter's concern regarding the potential delay in specifying and ordering a test mattress to correctly fit the non-full-size crib being tested, this issue could be addressed easily if the manufacturer includes a test mattress in the crib's bill of materials at the design stage. This will ensure that all crib components, including the test mattress, are procured at
the same time. Thereafter, the test mattress will be available for testing, when needed, eliminating any additional testing delays or increased costs by the test laboratories.

As for the commenter’s concern regarding the use of a test mattress just large enough to accommodate the impactor used during the mattress impact test, in general, using any test mattress that is smaller than the interior surface area of the crib will be more stringent than using a mattress equivalent to the crib’s interior surface area. A smaller test mattress will transfer more energy into the mattress support system. Specifically, using the 18 inches x 18 inches x 3 inches mattress pad as an example, the impact head, about 8 inches across, when positioned 2 inches from the sides in a corner will hit the test mattress such that it overlaps the midplane or geometric center of the test mattress. Therefore, the test mattress foam will sustain more damage than a larger mattress. Unless replaced for each test, it will soften, thereby transmitting more energy into the mattress support structure. CPSC staff believes that using an undersized mattress will mean less repeatability from lab to lab and different force distributions experienced on each crib.
Once a crib mattress standard is developed, which would diminish the variability currently inherent in the mattress manufacturing process, testing non-full-size cribs with their supplied mattresses may be more workable. However, for the present, we feel that it is more important to ensure repeatability between test laboratories by requiring the same vertical mattress impact test for both full-size and non-full-size cribs.

27. Replacement Mattresses in Non-Full-Size Cribs

(Comment 32) - Several commenters argued for modifying the warning on non-full size cribs, which states, in part: "Use ONLY mattress/pad provided by manufacturer. . . ." and instead use language that does not specify the manufacturer of the replacement mattress, because some manufacturers make mattresses for other manufacturers' products. One commenter supported an immediate change in the language in the warning, and other commenters supported a language change only after a separate mattress standard has been developed.

(Response 32) - The non-full-size crib standard requires all non-full-size cribs to be sold with their own mattress. These comments only relate to a warning label about replacement mattresses, and do not suggest changing the requirement for the mattress supplied with the non-
full-size crib. We agree that replacement mattresses made by manufacturers other than the supplier of the non-full-size crib can achieve a satisfactory fit, because there are many common sizes among non-full-size cribs. Furthermore, we agree that, without alternatives, consumers may resort to homemade bedding surfaces when they need to replace a mattress. Pads that are "designed for" a given crib will simulate all dimensions (edge contours, overall area, density, and thickness) of the original mattress supplied by the manufacturer. A mattress with the dimensions necessary for eliminating hazardous gaps in the crib can be manufactured satisfactorily by anyone, not just the original manufacturer. We believe it would be better to address this issue after a mattress standard has been created.

(Comment 33) - A commenter stated that, "If the CPSC mandates that consumers 'use only the mattress/pad provided by the manufacturer' then retailers will be inclined to stop offering alternative mattresses/pads."

(Response 33) - The final rule does not mandate what mattress a consumer can use, and it does not prohibit the sale of replacement mattress pads. The standard simply requires a warning label on the product. The label mentioned by the commenter has been part of the ASTM
standard for non-full-size cribs since 1997, and JPMA-certified non-full-size cribs have displayed that warning since that time. The commenter does not provide any data or evidence to support the contention that retailers will stop offering alternative mattresses/pads. Consequently, we will wait to revise this warning label until after a mattress standard has been created, as suggested by other commenters.

28. Misassembly

(Comment 34) - Several commenters suggested that products should be designed so that the consumer-assembled parts cannot be misassembled. They suggested that all parts of a crib should fit only in the correct orientation, and that if misassembled, the crib would be unusable.

(Response 33) - This suggestion originates from reports of fatal incidents, wherein a crib side was installed upside-down. We have considered such a requirement for the standard, but it would be difficult to implement. Any part of a product can be misassembled, and there are also certain parts of cribs that can be safely used in any orientation. Manufacturers could resort to more preassembly of crib components to meet this commenter’s suggestion, but due to the size of an assembled crib and its components, any preassembly would likely be
very limited in nature and thus would not solve the problem.

The requirement to make a crib unusable when a part is misassembled is not feasible because consumer modifications and misassemblies could be clever and forceful. Questions to consider include: Can the potential misassembly involve consumer use of hand tools and off-the-shelf fasteners? What if the misassembled part is redrilled to make it fit? How can a manufacturer make a part unusable if misassembled, when the test lab is allowed to ignore the manufacturer’s instructions?

It would be difficult, perhaps impossible, to devise a reliable method for testing such a requirement. The testing permutations needed to prove the utility of some parts in all possible configurations would increase the number of tests that would have to be performed, because each part would have to be tested in every possible position. Although we agree that the principle of making parts oriented in only one direction is sound, the testing needed to prove the inability to use the part makes testing the requirement impractical. The requirement in the standard to clearly mark the manufacturer’s recommended installation orientation addresses the problem and highlights the design principle for manufacturers.
29. Utility of Drop-Side Cribs

(Comment 35) - One commenter claimed that drop-side cribs are necessary for some caregivers because some caregivers are shorter. The commenter also suggested that professional child care environments should be allowed to use drop-side cribs because infants are supervised constantly when they are in the crib, and the cribs are checked routinely for safety.

(Response 35) - Although we agree that people who are shorter in stature may have more difficulty when placing infants into cribs than people who are taller, the standard does not prevent crib designers from making cribs that have sides that lower in some manner to help access the crib interior. Cribs with a gate that swings downward on a piano hinge commonly are available and meet the requirements of the standard. Other designs that raise and lower the side of the crib are possible. These alternative designs provide the same convenience as traditional drop-side cribs.

As for the commenter’s argument regarding supervision of infants in professional care environments, we agree that professional child care environments generally have a higher level of supervision than the average residential child care environment. However, cribs are designed with
the idea that children can be left in them unsupervised. With respect to routine safety checks, CPSC staff does not recommend relying on human behavior for safety, when a design change is available that can eliminate a hazard. Within the field of prevention science, behavioral solutions are always the last choice when designing for safety, because humans are fallible.

30. Fall Hazards

(Comment 36) - A few commenters expressed concern about hazards associated with falls from cribs. These commenters agreed that it is not appropriate to lower the age recommendation or increase the crib side heights. However, the commenters urged the Commission to research these issues and develop innovative solutions, including thorough public education efforts, to limit hazards when children climb out of cribs. Another commenter recommended that the CPSC and ASTM consider setting a maximum crib height, as measured from the top rail to the floor.

(Response 36) - We acknowledge that injuries resulting from crib-related falls rank high in terms of the number of incidents. The new crib standards contain labeling requirements, but not any design or performance requirements, to address this hazard. When discussing height, some distinctions must be made. The side height of
a crib is the height from the top of the mattress support (for full-size cribs) in its lowest position, to the lowest part of the top rail. This dimension has a minimum that is set by each crib standard. For instance, it is 26 inches for full-size cribs. This minimum height is required to help prevent children from climbing out of the crib. One also can measure the crib height, which is measured from the floor to the lowest part of the top rail. Neither the CPSC nor ASTM set a requirement for this measurement (which is the measurement to which the commenter refers).

Setting a maximum crib height will not reduce the number of incidents of children climbing and falling out of cribs (because that is dictated by the side height). Therefore, a maximum crib height will not prevent injuries. A maximum crib height could reduce, perhaps, the severity or number of injuries. Side height requirements for full-size cribs specify a minimum of 26 inches between the top of the mattress support in its lowest position, and the top of the lowest rail. Thus, even if the mattress support was on the floor, the minimum fall distance would be 26 inches, which still can result in an injury. No maximum crib height will eliminate injuries from falls, and setting an arbitrary number above 26 inches as a maximum height would be design restrictive.
Many non-drop-side cribs have lower overall heights than the average traditional drop-side crib. We took measurements of 48 drop-side cribs and 15 non-drop-side cribs and found the following:

<table>
<thead>
<tr>
<th>Crib Type</th>
<th>Crib Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drop-side cribs</td>
<td>33” to 43”</td>
</tr>
<tr>
<td>Non-drop-side cribs</td>
<td>32” to 39.75”</td>
</tr>
</tbody>
</table>

Based on this sample, non-drop-side crib heights do not appear to be higher, but are at, or below, traditional drop-side crib heights. A shorter crib height would require fewer construction materials and could result in lower crib weight (which could reduce associated shipping costs). Thus, crib manufacturers may be inclined to offer cribs with shorter heights. We believe that the availability of cribs with shorter heights may increase, because the clearance formerly needed under the crib for the operation of drop-sides no longer would be necessary.

31. Crib Side Heights

(Comment 37) - A commenter claimed that crib manufacturers now are using the bare minimum side heights and that, when drop-sides were allowed, many manufacturers exceeded the minimum side height, thereby preventing some falls. The commenter did not include data to support this
assertion that crib manufacturers are reducing the side height now that they are no longer making drop-side cribs.

(Response 37) - Measurements of various cribs taken by CPSC staff show that there are some drop-side cribs and some non-drop-side cribs that just meet the minimum side height requirement and there are some drop-side cribs and non-drop-side cribs that have greater-than-minimum side heights.

The minimum side height requirement in the crib standard was developed with an intended user in mind (a child under the height of 35 inches). Even so, there always will be a certain population of children who will be capable of climbing out of a crib, even cribs with a side height greater than what is required by the crib standards. If the overall average side height of cribs decreased to the minimum side height required in the standard, and inadvertently resulted in a higher frequency of children climbing out, CPSC staff believes that the likelihood of serious injury is lessened by the reduction in the overall fall height due to shorter crib heights (based on the sample of cribs examined by CPSC staff).

F. Changes to Proposed Rule

1. Full-Size Crib Standard
The Commission proposed incorporating ASTM F 1169-10 with one modification: excluding the provision, section 6.12, that requires retightening of screws and bolts between the crib side latch test and the mattress support vertical impact test. Like the proposal, the final rule incorporates by reference ASTM F 1169-10 with the modification to exclude the hardware retightening provision. The final rule makes one additional modification to ASTM F 1169-10, modifying the spindle/slat testing provision in 7.7.1 of the ASTM standard in order to clarify how to test a crib with folding or movable sides. The final rule adds a sentence to the end of section 7.7.1 of ASTM F 1169-10, which states: "For cribs incorporating folding or moveable sides for purposes of easier access to the occupant, storage, and/or transport, each side segment (portion of side separated by hinges for folding) shall be tested separately." This change responds to a comment that the CPSC received on the proposed rule (see section E of the preamble for discussion of the comment and further explanation of the need for this change). Also, ASTM recently voted to approve adding this language when it next revises ASTM F 1169.

2. Non-Full-Size Crib Standard
The Commission proposed incorporating ASTM F 406-10 with several modifications to address non-full-size cribs. The proposed rule would make four modifications and two editorial changes to ASTM F 406-10. Most proposed changes were intended to make the non-full-size crib standard more consistent with the full-size crib standard. The proposed modifications were: (1) replacing the mattress support performance requirement in ASTM F 406-10 with the requirement that is in the ASTM full-size crib standard; (2) changing the side impact test in ASTM F 406-10 to make it identical to the requirements in the ASTM full-size crib standard; (3) adding a requirement for movable side latches that is similar to a provision in previous versions of the ASTM F 406 standard; and (4) specifying the order for conducting structural tests, as in the full-size crib standard. The proposed editorial changes were: (1) excluding provisions in ASTM F 406-10 that cover only play yards; and (2) moving the recordkeeping provision from the appendix of ASTM F 406-10 to the general requirements section. See 75 FR 43308 (July 23, 2010).

The final rule incorporates ASTM F 406-10a by reference, with certain modifications. This subsequent version of the ASTM non-full-size crib standard, approved on October 15, 2010, and published in November 2010,
includes most of the changes that were in the proposed rule. Specifically, ASTM F 406-10a contains the recordkeeping provision in the general requirements section (now in section 5.20); the mattress support impact performance requirement (now included in sections 6.14, and 8.7); proposed changes to the side impact test (now included in sections 6.16, and 8.9); the provision for movable side latch testing (now included in section 6.13.1); and the order of testing (now in section 6.8).

Some provisions in ASTM F 406-10a are worded slightly differently than the language in the proposed rule. These differences in wording are editorial. The proposed modifications that are not adopted in ASTM F 406-10a are those that excluded provisions specifically related to play yards. Thus, the final rule continues to exclude these play yard-specific provisions.

In addition to the differences between ASTM F 406-10 and F 406-10a discussed in the preceding paragraph, there are a few other differences between the two versions (which therefore result in differences between the CPSC's proposed non-full-size crib standard and the final standard). Most differences between the two versions are editorial; for example, the revised standard rearranges the order of some sections and makes minor wording changes to make the
language more consistent with the full-size crib standard (ASTM F 1169-10). The CPSC has reviewed these changes and concludes that only one change is a substantive change that would reduce safety. ASTM F 406-10a adds the provision that was (and continues to be) in the ASTM standard for full-size cribs, which requires the retightening of screws and bolts between tests. The CPSC’s final rule for non-full-size cribs excludes this provision, just as the CPSC’s final rule for full-size cribs does.

The final rule for non-full-size cribs also adds language concerning testing of cribs with folding sides as in the final rule for full-size cribs. The final rule for non-full-size cribs includes one other modification that was not in the proposal. This change modifies the language for a warning label that cautions against placing netting or other covers over the product. The current wording in ASTM F 406-10a mentions only “play yards.” The final rule substitutes the word “product” for “play yard,” thus making the warning label also applicable to non-full-size cribs. The Commission did not receive any comments on this labeling issue. However, it is related to the effort in the CPSC’s proposed and final non-full-size crib standards to exclude provisions that relate only to play yards. Recently, ASTM approved these two changes (concerning
folding cribs and the warning label regarding netting and covers) for its next version of ASTM F 406, but they are not in ASTM F 406-10a.

3. Effective Date

The Commission proposed a 6-month effective date (as measured from the date of publication of a final rule in the Federal Register). The final rule maintains the 6-month effective date but establishes two compliance dates: 6 months for all entities subject to the rule, except for child care facilities, family child care homes, and places of public accommodation which have a 24-month compliance date. As discussed in sections E.8 and 10 of this preamble, the Commission received several comments from child care providers describing the impact that the crib standards could have on them, and the Commission believes that places of public accommodation face similar issues. The final rule provides a longer compliance period for these entities to allow them additional time to purchase compliant cribs and to absorb the costs of meeting the standards.

4. References in 16 CFR 1500.18

When the Commission proposed the crib standards, it also proposed revising 16 CFR 1500.18(a)(13) and (14), which state that full-size cribs that do not comply with 16
CFR part 1508 and non-full-size cribs that do not comply with 16 CFR part 1509 are banned hazardous substances under the FHSA. We proposed to replace the references to 16 CFR parts 1508 and 1509 with references to the CPSC’s new crib standards which will be codified at 16 CFR parts 1219 and 1220. As noted earlier in this preamble, elsewhere in this issue of the Federal Register, we are revoking the crib regulations that the Commission previously issued under the FHSA and are codified at 16 CFR parts 1508 and 1509. Given that section 104(b) of the CPSIA changed the regulation of cribs (and other durable infant or toddler products) from the FHSA to the CPSA, we have determined that it will reduce confusion to remove the provisions in 16 CFR 1500.18(a)(13) and (14) altogether rather than changing the references. This is consistent with the revocation of 16 CFR parts 1508 and 1509.

G. Assessment of Voluntary Standards ASTM F 1169-10 and ASTM F 406-10a and Description of the Final Rule

1. Section 104(b) of the CPSIA: Consultation and CPSC Staff Review

Section 104(b) of the CPSIA requires the Commission to assess the effectiveness of the voluntary standard in consultation with representatives of consumer groups, juvenile product manufacturers, and other experts. This
consultation process for the full-size and non-full-size crib standards has involved: an ANPR, a public crib roundtable, and in-depth involvement with ASTM. CPSC staff’s consultations with ASTM are ongoing.

2. Description of the Final Standard for Full-Size Cribs, Including Changes to the Requirements of ASTM F 1169-10

The Commission believes that the provisions of ASTM F 1169-10 are effective to reduce the risk of injury associated with full-size cribs. The modifications to ASTM F 1169-10 strengthen the ASTM standard. The final rule incorporates by reference ASTM F 1169-10 with two modifications:

- exclusion of the provision in the voluntary standard concerning retightening of screws and bolts between the crib side latch test and the mattress support vertical impact test; and
- addition of language to the voluntary standard clarifying how to conduct the slat/spindle strength test on a crib with folding or movable sides.

a. Scope, Compliance Dates, and Definitions (§ 1219.1)

Like the proposal, the final rule states that this part establishes a consumer product safety standard for new
and used full-size cribs. In accordance with section 104(c) of the CPSIA, this section states that the standard applies to the manufacture, sale, contract for sale or resale, lease, sublet, offer, provision for use, or other placement in the stream of commerce of a new or used full-size crib. This section provides a compliance date of 6 months (as measured from the date of publication of this final rule in the Federal Register) for all entities subject to the rule, except for child care facilities, family child care homes, and places of public accommodation which will have 24 months (as measured from the date of publication of this final rule in the Federal Register) to provide cribs for use that comply with the standard. As discussed in section H of this preamble, due to the number of compliant cribs that child care centers and places of public accommodation will need to provide for use, the final rule provides an additional 18 months for them to meet the full-size crib standard.

Section 1219.1(c) defines full-size baby crib as defined in ASTM F 1169-10 as a bed, with certain interior dimensions, that is designed to provide sleeping accommodations for an infant. In accordance with section 104(c) of the CPSIA, the definition includes cribs in child care facilities and places of public accommodation.
affecting commerce. This section also provides the definition of "place of public accommodation affecting commerce" specified in section 104(c) of the CPSIA.

b. Requirements for Full-Size Cribs (§ 1219.2)

Incorporation by reference. Like the proposal, the final rule incorporates by reference ASTM F 1169-10, Standard Consumer Safety Specification for Full-Size Baby Cribs. The final rule requires compliance with the requirements of ASTM F 1169-10, with two modifications.

Modifications to the ASTM standard. The final rule for full-size cribs excludes the provision in section 6.12 of the ASTM standard that requires retightening of screws and bolts between the crib side latch test and the mattress support vertical impact test (§ 1219.2(b)(1) of the CPSC's standard). This is identical to the proposed rule. As discussed in the preamble to the proposal (75 FR at 43314 through 43315), exclusion of this retightening provision strengthens the standard. Conducting the tests without retightening the hardware better represents the real use of a crib. Retightening fasteners would sever the chain of accumulated conditioning effects that the crib undergoes during the sequence of tests. Most of the comments that the CPSC received concerning this issue supported the CPSC's exclusion of this provision. Further discussion of
the rationale for excluding the hardware retightening provision is provided in section E.24 of this preamble.

The final rule adds one provision for full-size cribs that was not contained in the proposed rule. The final rule adds a sentence to section 7.7.1 of ASTM F 1169-10 to clarify how to conduct the spindle/slat static force test with a crib that has folding or movable sides (§1219.2(b)(2) of the CPSC's standard). The slat strength test is intended to verify that cribs slats can withstand 80 lbf. Without the clarification, conducting the test on a crib that has a hinge or other folding mechanism could result in testing the structural integrity of the hinge rather than the strength of the slats. Thus, the final rule adds the following sentence: “For cribs incorporating foldable or moveable sides for purposes of easier access to the occupant, storage, and/or transport, each side segment (portion of side separated by hinges for folding) shall be tested separately.” The addition of this language strengthens the ASTM standard, because it eliminates an ambiguity about testing this type of crib.

Requirements of ASTM F 1169-10. The final rule incorporates the other requirements of ASTM F 1169-10 without change. These requirements establish a comprehensive standard for the safety of full-size cribs.
ASTM F 1169-10 includes definitions; general requirements; performance requirements; specific test methods; and requirements for marking, labeling, and instructional literature. The key provisions of both ASTM standards are outlined in section G.4. of this preamble.

3. Description of the Final Standard for Non-Full-Size Cribs, Including Changes to the Requirements of ASTM F 406-10a

The Commission believes that the provisions of ASTM F 406-10a, with the specified modifications, are effective to reduce the risk of injury associated with non-full-size cribs. The final rule incorporates a version of ASTM F 406 that ASTM approved after the Commission had published its proposed rule and includes most of the modifications that the Commission proposed. These changes make ASTM F 406-10a more consistent with the ASTM standard for full-size cribs, rendering the standard more protective than the previous version. The modifications in the CPSC’s final rule further strengthen the standard. The final rule incorporates by reference ASTM F 406-10a with four modifications that:

- exclude the hardware retightening provision;
• add language clarifying how to conduct the slat/spindle test on cribs with folding or movable sides;
• revise a warning concerning netting or other covers so that it includes non-full-size cribs; and
• exclude provisions that apply only to play yards.

a. Scope, Compliance Dates, and Definitions (§ 1220.1)

Like the proposal, the final rule states that this part establishes a consumer product safety standard for new and used non-full-size cribs. In accordance with section 104(c) of the CPSIA, this section states that the standard applies to the manufacture, sale, contract for sale or resale, lease, sublet, offer, provision for use, or other placement in the stream of commerce of a new or used non-full-size crib. This section provides a compliance date of 6 months for all entities subject to the rule (as measured from the date of publication of this final rule in the Federal Register), except for child care facilities, family child care homes, and places of public accommodation which will have 24 months (as measured from the date of publication of this final rule in the Federal Register) to provide cribs that comply with the standard. As discussed in section H of this preamble, due to the number of
compliant cribs that these entities will need to provide for use, the final rule provides an additional 18 months for them to meet the non-full-size crib standard.

Section 1220.1(c) defines non-full-size baby crib as defined in ASTM F 406-10a and explicitly excludes play yards. (A play yard is defined as "a framed enclosure that includes a floor and has mesh- or fabric-sided panels primarily intended to provide a play or sleeping environment for children. It may fold for storage or travel.") A non-full-size crib is essentially a crib that has dimensions other than those of a full-size crib, as defined in the full-size crib standard. In accordance with section 104(c) of the CPSIA, the definition includes cribs in child care facilities and places of public accommodation affecting commerce. This section provides the definition of "place of public accommodation affecting commerce" specified in section 104(c) of the CPSIA. It also provides definitions of terms relevant to the definition of non-full-size crib, such as "portable crib" and "play yard."

b. Requirements for Non-Full-Size Cribs (§ 1220.2)

Yards. The final rule requires compliance with the requirements of ASTM F 406-10a, with four modifications.

Modifications to the ASTM standard. The final rule for non-full-size cribs excludes the provision in section 6.10 in the ASTM standard that requires retightening of screws and bolts between the crib side latch test and the mattress support vertical impact test (§1220.2(b)(3) of the CPSC standard). This exclusion was not in the proposed rule for the non-full-size crib standard because the proposal referenced ASTM F 406-10, which did not contain the hardware retightening provision. Excluding this provision is consistent with the CPSC’s standard for full-size cribs. The same reasons for that exclusion (see part E.24 of this preamble) apply with regard to non-full-size cribs.

The second modification to ASTM F 406-10a adds a sentence to clarify the testing of cribs with folding or movable sides. This modification was not in the proposed rule, but responds to comments on the proposal and is identical to the change in the full-size crib standard. This provision adds a sentence to section 8.10.1 of ASTM F 406-10a to clarify how to conduct the spindle/slat static force test with a crib that has folding or movable sides (§ 1220.2(b)(5) of the CPSC’s standard). Addition of this
language strengthens the ASTM standard because it eliminates an ambiguity about testing this type of crib.

The third modification to ASTM F 406-10a revises a warning in section 9.4.2.6 of the ASTM standard that cautions against using netting or other covers (§ 1220.2(b)(12) of the CPSC's standard). The modification replaces the words "play yard" with the word "product" because the hazard posed by such covers exists for non-full-size cribs as well as play yards.

The final modifications to ASTM F 406-10a remove the provisions that relate only to play yards (§ 1220.2(b)(1), (2), (4), and (6) through (11) of the CPSC standard). Section 104(c) of the CPSIA distinguishes cribs (both full-size and non-full-size) from other durable infant or toddler products. This different treatment of cribs necessitates that the CPSC establish separate standards for non-full-size cribs and for play yards. In the future, we intend to issue a standard for play yards under section 104(b) of the CPSIA.

Requirements of ASTM F 406-10a. The final rule incorporates the other requirements of ASTM F 406-10a without change. The requirements establish a comprehensive standard for the safety of non-full-size cribs. Like the ASTM standard for full-size cribs, ASTM F 406-10a includes
definitions; general requirements; performance requirements; specific test methods; and requirements for marking, labeling, and instructional literature. These requirements are essentially the same as the requirements ASTM F 1169-10 establishes for full-size cribs. The key requirements of both ASTM standards are outlined in the following section of this preamble.

4. Principal Requirements of Both ASTM Crib Standards

Both the full-size and non-full-size crib standards incorporate by reference the relevant ASTM crib standards, with certain modifications explained above. The principal requirements are the same in both ASTM standards. These are:

- Dynamic impact testing of the mattress support system – intended to address incidents involving collapse or failure of mattress support systems. The 2010 standards updated the tests to address fatigue of mattress support brackets, support hardware, and mattress support due to children jumping in cribs.

- Impact testing of side rails and slat strength/integrity testing – intended to prevent slats and spindles from breaking and/or detaching during use. The requirements were made more
stringent for the 2010 standards. The modification was intended to prevent entrapments by reducing the likelihood of slat/spindle breakage and the gaps that accompany them.

- Mattress support system testing – intended to ensure that the mattress support does not become detached from the frame, potentially resulting in a fall.

- Latching mechanism tests—intended to ensure that latching and locking mechanisms work as intended, preventing unintended folding while in use. Also requires that they be used with drop gates and movable sides.

- Crib side configurations – intended, in part, to limit movable (drop) sides. Addresses the numerous incidents related to drop-side failures.

- Label requirements – the required warnings were reordered in the 2010 full-size crib standard to emphasize fall hazards.

- Openings requirement for mattress support systems – a new requirement for the full-size crib 2010 standard that addresses gaps in the mattress support system to minimize the possibility of entrapment.
• Requirements for wood screws and other fasteners – a new requirement for the 2010 standards that addresses hazards that exist when wood screws are the primary method of attachment. Also includes other fastener requirements to address incidents related to loose hardware and poor structural integrity.

• Cyclic testing – a new requirement for the 2010 standards that addresses incidents involving failures of non-drop-side hardware and poor structural integrity. This requirement was taken from the Canadian standard and simulates long-term shaking of the product by a child.

• Misassembly issues – a new requirement for the 2010 standards where it must either be impossible to misassemble key elements or those elements must have markings that make it obvious when they have been misassembled.

• Test requirement for accessories – a new requirement for the 2010 standards that is intended to address any cribs that may now, or in the future, include accessories, such as bassinets or changing tables.
• Crib interior dimensions – a new requirement for the 2010 standards that is taken directly from the CPSC’s mandatory regulation and is intended to ensure that all full-size cribs have the same interior dimensions.

• Component spacing – a new requirement for the 2010 standards that is taken directly from the CPSC’s mandatory regulation and is intended to prevent child entrapment between both uniformly and non-uniformly-spaced components, such as slats.

5. The Final Crib Standards Address the Principal Hazards Related to Cribs

This section summarizes how the standards for full-size and non-full-size cribs address the principal crib-related hazards that the CPSC has identified through its review of incidents involving cribs.

The crib standards address structural failures of cribs that are related to drop-side failures through a requirement that the sides of a crib be fixed in place and have no movable sections less than 20 inches from the top of the mattress support (effectively eliminating drop sides). The standards address problems with non-drop-side hardware and poor structural integrity through requirements
for screw fasteners, locking components, and the cyclic side (shake) test. Loosening of wood screws and other fasteners also has led to crib incidents. The standards address these hazards through the wood screw requirements of 16 CFR 1508 and 1509 (which are now in ASTM F 1169-10 and ASTM F 406-10a), restricting the use of wood screws as primary fasteners; prohibiting use of wood screws in structural elements that a consumer would need to assemble; and imposing stricter requirements for the use of threaded metal inserts and other metal-threaded fasteners. Problems with the structural integrity of cribs and hardware issues (such as loosened joints, detached sides and overall poor structural integrity) are addressed by the cyclic side (shake) test, which simulates a child's lifetime shaking of the crib. The test applies a cyclic force (9,000 vertical and then 9,000 horizontal load cycles using 27 lbf) at the midpoint of each top rail, end, and side of the crib. To address mattress-related issues (such as, entrapments between a mattress support and a crib structure, and mattress support structural failures), the crib standards include a mattress impact cyclic test that consists of dropping a 45-pound mass (20 kg) repeatedly every 4 seconds onto a polyurethane foam test mattress covered in vinyl and supported by the mattress support system. The crib
standards address crib slat disengagement (which can result in entrapment) by specifying that any crib side with slats must be tested (previously the number of sides was not specified and manufacturers could test just one side). The crib standards address broken or dislocated slats, which can cause a gap of approximately 5 inches, by making the slat/spindle strength test more stringent, requiring a set number of slats to withstand an 80-pound load. The crib standards address misassembly issues by including a requirement which states: "Crib designs shall only allow assembly of key structural elements in the manufacturer’s recommended use position or have markings that indicate their proper orientation. The markings must be conspicuous in the misassembled state."

H. Effective Date

The Administrative Procedure Act ("APA") generally requires that the effective date of a rule be at least 30 days after publication of the final rule. 5 U.S.C. 553(d). The Commission proposed that the standard would become effective six months after publication of a final rule. The Commission invited comments regarding the sufficiency of a 6-month effective date for the crib standards, which are discussed in section E.10 of this preamble.
Based on review of the comments, the final rule provides a 6-month effective date (as measured from the date of publication of this final rule in the Federal Register) with two compliance dates: a 6-month compliance date for all entities subject to the rule, except for child care facilities, family child care homes, and places of public accommodation, which have 24 months (as measured from the date of publication of this final rule in the Federal Register) to provide cribs that comply with the standards. This approach alleviates concerns that there may not be a sufficient supply of cribs that meet the new standards for these entities to provide compliant cribs within a 6-month effective date. Providing this additional period of time for these entities addresses their concerns about the costs of compliance by allowing additional time for them to locate funding and to absorb the costs of the rule. This approach still requires manufacturers and retailers (as well as other entities selling, leasing or otherwise providing cribs) to supply compliant cribs within 6 months just as the Commission had proposed. Providing tiered compliance dates should allow for an orderly process of supply, so that cribs are first manufactured and made available for sale before child care facilities, family child care homes, and places of public accommodation, which
must purchase compliant cribs, are required to comply with the standards. This approach also will not delay the availability of cribs in stores for individual consumers to purchase, which would have been the case if the rule established a longer uniform effective date to accommodate the impact on child care facilities, family child care homes, and places of public accommodation. By setting a compliance date of 24 months from the date of publication of this final rule in the Federal Register, the Commission intends that any such entity that comes into being after the compliance date must comply with this rule when it begins operating.

An additional reason underlies the Commission's decision to create a separate compliance date for child care facilities, family child care homes, and places of public accommodation. It is unprecedented for the Commission to promulgate a rule containing a mandatory standard that not only sets product performance requirements but also places responsibility for compliance with the rule, in part, on users or providers of the product in an occupational setting. We are required to do so in this case, however, because Congress singled out cribs for special treatment in the CPSIA.
Even though certain of the other durable infant products on which we will be promulgating mandatory standards may also be found in child care or other settings covered by section 104 of the CPSIA, it is only cribs failing to meet the mandatory standard that are required to be replaced by certain statutorily defined users and providers by a date to be determined by the Commission.

Of course, manufacturers of products are accustomed to meeting performance standards. Our understanding is that most crib manufacturers have been following this rulemaking and the attendant ASTM voluntary standards proceedings very closely, if not participating in them directly. Their numbers, though, are relatively few. In comparison, there are an estimated 59,000 child care and family home care providers and an estimated 53,000 public accommodations covered by this rule, many of whom may be wholly unaware of its consequences.

During this rulemaking, the issues that have been raised as part of the record by child care providers apply, in our view, to all users or providers of cribs described in sections 104(c)(2)(B) and (D) of the CPSIA. While we had no comments from operators of public accommodations, they likely will face the same difficulties as child care
providers in complying in a timely manner with the new crib standard.

For instance, the number of complying cribs that will have to be manufactured to meet the new standard, just for those cribs needed in the child care setting, is, in our estimation, at least ten times more than those facilities usually buy in one year (cribs, on average, are normally on a 10-year replacement cycle). This surge in demand is in addition to the cribs that will, upon this rule becoming effective, need to be replaced by owners or operators of public accommodations, who would have otherwise not necessarily done so during that period. Whether enough complying cribs can be made in just one year's time to meet this increased need, on top of the normal annual number of cribs required by parents, is uncertain. All crib users and providers will be buying from the same finite pool of new complying cribs, but certain of those purchasers will be doing so pursuant to the added responsibilities placed upon them by this rule, as required by the CPSIA. The expense of replacing all of their non-complying cribs will weigh more heavily on the less affluent providers, whether they are child care facilities or public accommodation facilities.
Given these realities, and the Commission’s strong desire to ensure implementation of the rule is consistent with the statute’s goal of providing safer sleep environments for those children using cribs, the Commission believes it is prudent to take all reasonable steps to try to provide adequate time for there to be a sufficient supply of complying cribs to meet demand, and for child care facilities, family child care homes, and places of public accommodation to obtain complying cribs before the penalties that could be imposed on them for failure to do so become effective. Therefore, the Commission is establishing a compliance date for those persons of 24 months (as measured from the date of publication of this final rule in the Federal Register) for them to provide compliant cribs. This gives affected persons an additional 18 months beyond the effective date that was suggested in the proposed rule to replace their noncomplying cribs. The Commission will also use this time to attempt to educate all those individuals and entities affected of their responsibilities under the law so they can plan for the replacement of their cribs in an orderly and timely fashion.

The Commission strongly encourages all child care facilities, family child care homes and public
accommodation facilities to begin replacing their cribs with compliant cribs as quickly as the market allows, starting with the oldest ones first, as our experience has shown that the longer cribs are used, the more hazards they present to the children placed in them. Every day that a child is in an unsafe crib, or any unsafe sleep environment for that matter, puts that child at risk of serious injury or death. Every person who provides cribs in a child care setting or as part of the furnishings in a public accommodation has a responsibility to provide the safest possible environment for the children using those cribs.

I. Regulatory Flexibility Act

The Regulatory Flexibility Act ("RFA") generally requires that agencies review proposed rules for their potential economic impact on small entities, including small businesses, and prepare an initial regulatory flexibility analysis. 5 U.S.C. 603. The RFA further requires that agencies consider comments they receive on the initial regulatory flexibility analysis and prepare a final regulatory flexibility analysis describing the impact of the final rule on small entities and identifying alternatives that could reduce that impact. Id. 604. This section summarizes the staff's final regulatory flexibility analyses for the full-size and non-full-size crib
standards, which is provided at Tabs A and B of the staff's briefing package.

1. Full-Size Cribs

a. The Market for Full-Size Cribs

As mentioned in section B.2 of this preamble, CPSC staff estimates that there are currently 68 manufacturers or importers supplying full-size cribs to the U.S. market. Of those that could be categorized, 10 are domestic importers; 42 are domestic manufacturers; 7 are foreign manufacturers; and 2 are foreign importers. CPSC staff estimates annual sales of new cribs to be about 2.4 million (could be an underestimate if new mothers buy more than one crib). CPSC staff estimates that there are currently approximately 591 models of full-size cribs compared to approximately 81 models of non-full-size cribs. Thus, approximately 88 percent of crib models are full-size cribs. Applying this percentage to the number of cribs sold annually results in a rough estimate of 2.1 million full-size cribs sold each year.

JPMA, the major U.S. trade association representing juvenile product manufacturers and importers, runs a voluntary certification program for several juvenile products. Approximately 30 firms (44 percent) supply full-size cribs to the U.S. market that have been certified by
JPMA as compliant with the ASTM voluntary standard F 1169-09. Additionally, 15 firms claim compliance, although their products have not been certified by JPMA. The regulatory flexibility analysis assumes that the 45 firms that provide cribs that are certified to, or claim to be compliant with, earlier ASTM standards, will remain compliant with ASTM standard F 1169-10.

As noted previously, section 104 of the CPSIA operates such that when the Commission’s crib standards take effect, they will apply to retailers of both new and used full-size cribs and to child care facilities and places of public accommodation, such as hotels, which provide full-size cribs to their patrons. Based on public comments received from child care centers in response to the proposed rule, it appears that child care centers typically use a mix of full-size and non-full-size cribs, but primarily non-full-size cribs. However, CPSC staff still assumes that places of public accommodation tend to provide non-full-size cribs to their customers, as opposed to the more unwieldy full-size cribs. The number of firms that may be selling or providing full-size cribs is unknown, but may be drawn from approximately 24,985 retail firms (at least 5,292 of which sell used products); 59,555 firms supplying child care services; and 53,021 locations offering public
accommodations to the public that may be supplying new or used full-size cribs.

b. Impact on Small Businesses

There are approximately 68 firms currently known to be producing or selling full-size cribs in the United States. Based on Small Business Administration (SBA) guidelines, which consider a manufacturer to be small if it has 500 or fewer employees and an importer to be small if it has 100 or fewer employees, 48 of these firms (36 domestic manufacturers, 10 domestic importers, and 2 firms with unknown sources of supply) are small. There are probably additional unknown small manufacturers and importers operating in the U.S. market.

According to SBA guidelines, retailers and service providers, such as child care centers and places of public accommodation, are considered small if they have $7 million or less in annual receipts. Approximately 93 percent of all retailers have receipts of less than $5 million, with an additional 3 percent having receipts between $5 million and $9.99 million. Excluding firms with receipts of between $5 million and $7 million, yields an estimated 23,236 small retail firms. Some portion of these retail firms would be affected by the final rule because only a small percentage of these small firms actually sell full-
size cribs. Thus, the number of small retail firms affected will be far fewer than 23,236. Among child care service providers, approximately 98 percent have receipts of less than $5 million, with an additional 0.9 percent having receipts between $5 million and $9.99 million. This suggests that roughly 58,364 small child care firms (of 59,555) could be affected.

i. Small Manufacturers

The impact of the standard for full-size cribs on small manufacturers will differ based on whether their products comply with ASTM standard F 1169-10. Of the 36 small domestic manufacturers, 24 produce cribs that are certified by JPMA or that they claim are in compliance with the voluntary standard. The impact on the 24 compliant firms is not expected to be significant. It seems unlikely that any of these products will require modification to meet the CPSC standard. Should any modifications be necessary, the modification would likely be minor (such as more effective screws or screw combinations).

The CPSC standard could have a significant impact on one or more of the 12 firms that are not compliant with the voluntary standard, because their products might require substantial modifications. The costs associated with these modifications could include costs for product design,
development and marketing staff time, and product testing. There may also be increased production costs, particularly if additional materials are required. The actual cost of such an effort is unknown, but could be significant, especially for the two firms that rely primarily or entirely on the production and sale of full-size cribs and related products, such as accompanying furniture and bedding, and for a third firm that produces only one other product. However, the impact of these costs may be diminished if they are treated as new product expenses that can be amortized.

The scenario described above assumes that only those firms that produce cribs that are certified by JPMA or that claim ASTM compliance will pass the voluntary standard’s requirements. This is not necessarily the case. CPSC staff has identified many cases in which products that are not certified by JPMA actually are compliant with the relevant ASTM standard. To the extent that this is true, the impact of the CPSC standard will be less significant than described.

ii. Small Importers

While 4 of the 10 small importers are not compliant with the voluntary standard, all would need to find an alternate source of full-size cribs if their existing
supplier does not come into compliance with the new requirements of the CPSC standard. The cost to importers may increase, and they, in turn, may pass on some of those increased costs to their customers. Some importers may respond to the rule by ceasing to import cribs that do not comply. However, the impact of such a decision may be lessened by replacing the noncompliant crib(s) with complying products or other juvenile products. Deciding to import an alternative product would be a reasonable and realistic way to offset any lost revenue, given that most small importers import a variety of products.

iii. Small Retailers and Child Care Centers

The CPSIA requires that all full-size cribs sold (or leased) by retailers or provided by child care centers to their customers comply with the CPSC’s full-size crib rule. This means that retailers, most of whom are small, will need to verify that any full-size cribs in their inventory (that they intend to sell or lease after the effective date), and any that they purchase in the future, comply with the regulation prior to offering the cribs for sale. CPSC staff believes that most retailers, particularly small retailers, do not keep large inventories of cribs. With an effective date six months after publication of the final rule, retailers of new products should have sufficient
notification and time to make this adjustment with little difficulty. The situation for retailers of used cribs is more complicated, however, because they may not always be able to determine whether the full-size cribs they receive comply with the new CPSC standard. For these affected retailers, it may be simpler to discontinue the sale of used full-size cribs. If cribs represent a small portion of the products they sell, then the impact of the rule on these firms may be limited.

Child care centers, family child care homes, and places of public accommodation must provide compliant cribs for their customers. The rule provides a 6-month effective date with an additional 18-month compliance period for these entities to meet the standards. This longer period to comply gives them additional time to purchase and replace their cribs that do not comply with the final rule. Without a longer period for compliance, the impact on these entities would be greater, particularly for those that would have to replace all of their cribs at once.

Based on data provided by the comments, it appears that the average child care center has between 4 and 45 cribs, fewer than half of which are likely to be full-size. Each crib costs approximately $500. Therefore, if 25 percent of the cribs that must be replaced are full-size
cribs, then replacement for an individual child care center
could run from $500 to as high as $5,500. The total one-
time cost to child care centers, the majority of which are
small, of replacing all of their full-size cribs is
estimated to be approximately $97 million nationwide.
Providing child care centers, family child care homes, and
places of public accommodation with 24 months to comply
with the new crib standards will reduce the impact on these
entities.

There are additional considerations concerning the
one-time costs child care providers face. Some costs may
be passed on to customers through small increases in the
rates child care providers charge. Child care providers
would recoup these costs over an extended period, while the
initial outlay for new cribs would be much more immediate.
Additionally, as several commenters noted, child care
centers are limited in how much of the costs can be passed
on to their customers. For example, one commenter stated
that approximately 35 percent of the children in their care
— more than 150,000 — receive some form of state subsidy,
and another provider stated that approximately one-third of
the children in their care receive some subsidy. Raising
rates above what customers can bear has the potential to
deprive families of child care or force them into
alternative child care arrangements that may not be subject to the final rule. The latter possibility has the potential for safety risks in excess of those that currently exist in child care centers.

Some centers could opt to replace their full-size cribs with play yards, which are less expensive to purchase (typically $100-$200) than full-size cribs, thereby spreading replacement costs over a longer period. While this would reduce the impact of the final rule, the alternative of providing play yards may be limited due to state licensing laws. The CPSC does not advocate the use of play yards over cribs, but acknowledges that the choice of play yards instead of cribs may be an option for some child care providers.

iv. Alternatives

Under section 104 of the CPSIA, one alternative that could reduce the impact on small entities would be to make the voluntary standard mandatory without any modifications. Adopting the current full-size crib voluntary standard without any changes potentially could reduce costs for 12 of the 36 small manufacturers and 4 of the 10 small importers that are not compliant already with the voluntary standard. However, these firms still will require substantial product changes in order to meet the voluntary
standard. Because the CPSC’s changes add little to the overall burden of the rule, adopting the voluntary standard without any changes will not offset significantly the burden that is expected for these firms.

Another way to reduce the impact on small firms would be to allow more time for such entities to comply with the final rule by providing a longer effective date for all entities. This would allow additional time for small manufacturers and small importers of non-compliant cribs. It could also alleviate inventory issues for small retailers.

A third alternative that could reduce the impact on small firms would be to provide an even longer compliance period for child care centers, family child care homes, and places of public accommodation. Although this would reduce the impact on the smaller of these entities, it would not have any impact on small manufacturers or importers.

2. Non-Full-Size Cribs

a. The Market for Non-Full-Size Cribs

CPSC staff estimates that there are currently at least 17 manufacturers or importers supplying non-full-size cribs to the U.S. market. Five of these firms are domestic importers and 10 are domestic manufacturers. Insufficient
information is available to determine whether the remaining firms are manufacturers or importers.

Five firms supply non-full-size cribs to the U.S. market that have been JPMA-certified as compliant with the ASTM voluntary standard. Additionally, two firms claim compliance, although their products have not been certified by JPMA. Therefore, including the firms that claim compliance with the ASTM standard, five manufacturers and one importer have products that are ASTM compliant. Additionally, one of the firms with an unknown source of supply also claims compliance with the ASTM standard. This analysis assumes that firms that are certified or claim to be compliant with earlier ASTM standards will remain compliant with ASTM standard F 406-10a.

As explained in the analysis concerning full-size cribs (section I.1.b. of this preamble), CPSC staff estimates annual sales to households to be about 2.4 million cribs. CPSC staff estimates that there are approximately 81 non-full-size crib models currently being supplied (versus 591 full-size crib models). Therefore, approximately 12 percent of the crib models on the U.S. market are non-full-sized. Applying this to the number of cribs sold annually yields a rough estimate of 293,000 non-full-size cribs sold each year.
As previously noted, section 104 of the CPSIA explicitly makes the crib standards applicable to retailers of both new and used non-full-size cribs and to child care facilities and places of public accommodation, such as hotels that supply non-full-size cribs to their patrons. Based on comments received from child care centers in response to the proposed rule, it appears that child care centers typically use a mix of full-size and non-full-size cribs, with a bias in favor of non-full-size cribs. CPSC staff still assumes that places of public accommodation tend to provide their customers with non-full-size cribs as opposed to full-size cribs. The number of firms that may be selling or providing non-full-size cribs is unknown, but may be drawn from the approximately 24,985 retail firms (at least 5,292 of which sell used products), the 59,555 firms supplying child care services, and the 53,021 locations providing public accommodations. Each of these groups may be supplying new or used non-full-size cribs to the public.

b. Impact on Small Businesses

There are approximately 17 firms currently known to be producing or selling non-full-size cribs in the United States. Based on the SBA's guidelines, which consider a manufacturer to be small if it has 500 or fewer employees and an importer to be small if it has 100 or fewer
employees, 14 suppliers are small firms (9 domestic manufacturers and 5 importers). The size of the remaining firms – two with unknown supply sources and one domestic manufacturer—could not be determined. There are probably additional unknown small manufacturers and importers operating in the U.S. market.

As explained in the analysis of the impact of the full-size crib standard, CPSC staff estimates that 23,236 retail firms would be considered small according to SBA’s guidelines. Not all of these small firms sell non-full-size cribs. Thus, the number of small retail firms affected will be fewer than 23,236. CPSC staff estimates that using SBA’s guidelines, there are approximately 58,364 small child care firms (of 59,555) and 42,437 small hotel firms (of 53,021 locations providing public accommodations) that could be affected by the crib standards.

i. Small Manufacturers

The impact of the CPSC’s non-full-size crib standard on small manufacturers will differ based on whether their products are expected to be compliant with ASTM standard F 406-10. Of the nine small domestic manufacturers, five are in compliance with the voluntary standard. The impact on the five compliant firms is not expected to be significant. It seems unlikely that any of these products will require
modification to meet the final standard. Should any modifications be necessary, they would be most likely minor (such as more effective screws or screw combinations).

The CPSC’s final standard for non-full-size cribs could have a significant impact on one or more of the four firms that are not compliant with the voluntary standard, because their products might require substantial modifications. The costs associated with these modifications could include product design, development and marketing staff time, and product testing. There may also be increased production costs, particularly if additional materials are required. The actual cost of such an effort is unknown, but could be significant, especially for the one firm that relies on the production and sale of non-full-size cribs and related products, such as accompanying furniture and bedding. However, the impact of these costs may be diminished if they are treated as new product expenses that can be amortized.

The scenario described above assumes that only those firms that produce cribs certified by JPMA or claim ASTM compliance will pass the requirements of ASTM F 406-10a. This is not necessarily the case. CPSC staff has identified many cases in which products not certified by JPMA actually are compliant with the relevant ASTM
standard. To the extent that this is true, the impact of the final rule will be less significant than described.

ii. Small Importers

Although four of the five small importers are not compliant with the voluntary standard, all would need to find an alternate source of non-full-size cribs if their existing supplier does not come into compliance with the new requirements of the final standard. The cost to importers may increase and they, in turn, may pass on some of those increased costs to their customers. Some importers may address the rule requirements by ceasing to import cribs that do not comply with the new standard. However, the impact of such a decision may be diminished by replacing the noncompliant cribs with complying products or other juvenile products. Deciding to import an alternative product would be a reasonable and realistic way to offset any lost revenue, given that most small importers import a variety of products.

iii. Small Retailers and Child Care Centers

The CPSIA requires that all cribs sold (or leased) by retailers or provided by child care centers to their customers comply with the CPSC's new crib standards. Thus, retailers will need to verify that any non-full-size cribs in their inventory (that they intend to sell or lease after
the effective date), and that any they purchase in the future, comply with the regulation prior to offering the cribs for sale. CPSC staff believes that most retailers, particularly small retailers, do not keep large inventories of cribs. With an effective date six months after publication of the rule, retailers of new products should have sufficient notification and time to make this adjustment with little difficulty. Retailers of used cribs may have difficulty determining whether the cribs they receive comply with the new CPSC standard, and therefore, may discontinue the sale of used non-full-size cribs. If cribs represent a small portion of the products they sell, then the impact of the rule on these firms may be limited.

Child care centers, family child care homes, and places of public accommodation must provide compliant non-full-size cribs for their customers. The rule provides a 6-month effective date (as measured from the date of publication of this final rule in the Federal Register) with an additional 18 months compliance period for these entities to meet the standards. This longer period of time to comply with the standards could reduce the impact on small firms. Based on data provided through public comments, it appears that the average child care center has between 4 and 45 cribs, more than half of which are likely
to be non-full-size. Each crib costs approximately $500. Therefore, if 75 percent of the cribs that must be replaced are non-full-size cribs, then replacement for an individual child care center could run from $1,500 to as high as $16,500. The total one-time cost to child care centers, the majority of which are small, of replacing all of their non-full-size cribs is estimated to be approximately $290 million nationwide. Providing child care centers, family child care homes, and places of public accommodation with 24 months (as measured from the date of publication of this final rule in the Federal Register) to comply with the new crib standards will reduce the impact on them. According to 2007 U.S. Census data, there are 53,021 establishments providing public accommodations. Assuming that all of these establishments provide an average of about three non-full size cribs for use by their clientele, as many as 160,000 cribs might need to be replaced at a cost of about $500 per crib, or approximately $80 million. This may be an overestimate as not all places of public accommodation provide cribs to their customers, but some portion of those that do will replace those cribs when the rule becomes effective.

As discussed in the analysis of the full-size crib standard, there are additional considerations concerning
the one-time costs for child care providers. Some costs may be passed on to customers through small increases in the rates child care providers charge (although the expenditure for new cribs would be far more immediate). Child care centers may have limited ability to pass these costs on to their customers, particularly in light of the number of children in child care who received some form of state subsidy. Although some child care centers could replace their non-full-size cribs with less expensive play yards (typically $100-$200), this alternative may not be available to some child care centers if state licensing laws require use of cribs rather than play yards.

Some hotels may provide a few non-full-size cribs for their customers. The number of cribs at any one establishment is likely to be low, especially because of the likelihood that parents traveling with young children will bring along sleep products, such as play yards or portable cribs, for their children. As with child care centers, this is a one-time cost for firms that, over time, likely can be passed on to customers. Firms, particularly smaller ones, may opt to reduce the replacement costs by ceasing to provide cribs to their customers, replacing only some cribs, or providing play yards instead of non-full-size cribs. Therefore, it is unlikely that the rule will
have a significant impact on a substantial number of firms that provide these cribs in places of public accommodation. The Commission believes that because places of public accommodation, like child care centers, will need to purchase compliant cribs to provide to their customers, the rule establishes a 24 month compliance date (as measured from the date of publication of this final rule in the Federal Register) for them to provide compliant cribs as well.

iv. Alternatives

The same alternatives for reducing the impact of the full-size crib standard also apply to reducing the impact of the non-full size crib standard. One alternative is to make the voluntary standard mandatory with no modifications. Adopting the current voluntary standard without any changes potentially could reduce costs for four of the nine small manufacturers and four of the five small importers who are not already compliant with the voluntary standard. However, these firms still will require substantial product changes in order to meet the voluntary standard. Since the changes add little to the overall burden of the rule on small manufacturers, adopting the voluntary standard with no changes will not offset significantly the burden that is expected for these firms.
Adopting the voluntary standard with no modifications could reduce the impact on small retailers and some child care providers.

Another alternative that could reduce the impact on small firms would be to allow more time for such entities to comply with the final rule by providing a longer effective date for all entities that are subject to the rule. This would allow additional time for small manufacturers and small importers of non-compliant cribs. It could also alleviate inventory issues for small retailers. A third alternative that could reduce the impact on small firms would be to provide an even longer compliance period for child care centers, family child care homes, and places of public accommodation. Although this would reduce the impact on the smaller of these entities, it would not have any impact on small manufacturers or importers.

J. Environmental Considerations

The Commission’s regulations provide a categorical exclusion for the Commission’s rules from any requirement to prepare an environmental assessment or an environmental impact statement because they “have little or no potential for affecting the human environment.” 16 CFR 1021.5(c)(2). This rule falls within the categorical exclusion.
K. Paperwork Reduction Act

This rule contains information collection requirements under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501-3520). Therefore, the preamble to the proposed rule (75 FR at 43319 through 43321) discussed the information collection burden of the proposed rule and specifically requested comments on the accuracy of our estimates. We did not receive any comments concerning the information collection burden of the proposal, and the final rule does not make any changes to that burden. We have applied to the U.S. Office of Management and Budget (OMB) for a control number for this information collection, and we will publish a notice in the Federal Register providing the number when the agency receives approval from OMB.

L. Preemption

Section 26(a) of the CPSA, 15 U.S.C. 2075(a), provides that where a "consumer product safety standard under [the CPSA]" is in effect and applies to a product, no state or political subdivision of a state may either establish or continue in effect a requirement dealing with the same risk of injury unless the State requirement is identical to the federal standard. (Section 26(c) of the CPSA also provides that states or political subdivisions of states may apply to the Commission for an exemption from this preemption
Section 104(b) of the CPSIA refers to the rules to be issued under that section as "consumer product safety rules," thus implying that the preemptive effect of section 26(a) of the CPSA would apply. Therefore, a rule issued under section 104 of the CPSIA will invoke the preemptive effect of section 26(a) of the CPSA when it becomes effective.

M. Certification

Section 14(a) of the CPSA imposes the requirement that products subject to a consumer product safety rule under the CPSA, or to a similar rule, ban, standard, or regulation under any other act enforced by the Commission, be certified as complying with all applicable CPSC requirements. 15 U.S.C. 2063(a). Such certification must be based on a test of each product, or on a reasonable testing program or, for children's products, on tests on a sufficient number of samples by a third party conformity assessment body accredited by the Commission to test according to the applicable requirements. Section 104(b)(1)(B) of the CPSIA refers to standards issued under that section as "consumer product safety standards." By the same reasoning, such standards also would be subject to section 14 of the CPSA. Therefore, any such standard would
be considered a consumer product safety rule, to which products subject to the rule must be certified.

Because full-size cribs and non-full-size cribs are children's products, they must be tested by a third party conformity assessment body whose accreditation has been accepted by the Commission. Elsewhere in this issue of the Federal Register, we have issued a notice of requirements to explain how laboratories can become accredited as third party conformity assessment bodies to test to the new crib standards. The Commission previously issued a notice of requirements for accreditation to test to the existing crib standards (16 CFR 1508 and 1509) in the Federal Register of October 22, 2008 (73 FR 62965). (Baby cribs also must comply with all other applicable CPSC requirements, such as the lead content requirements of section 101 of the CPSIA, the phthalate content requirements in section 108 of the CPSIA, the tracking label requirement in section 14(a)(5) of the CPSA, and the consumer registration form requirements in section 104 of the CPSIA.).

List of Subjects

16 CFR Part 1219
Therefore, the Commission amends Title 16 CFR chapter II as follows:

1. Add part 1219 to read as follows:

PART 1219 - SAFETY STANDARD FOR FULL-SIZE BABY CRIBS

Sec.
1219.1 Scope, compliance dates, and definitions.
1219.2 Requirements for full-size baby cribs.


§ 1219.1 Scope, compliance dates, and definitions.
(a) **Scope.** This part establishes a consumer product safety standard for new and used full-size baby cribs.

(b) **Compliance dates.** (1) Except as provided in paragraph (b)(2) of this section, compliance with this part shall be required on [insert date 6 months after date of publication in the FEDERAL REGISTER], and applies to the manufacture, sale, contract for sale or resale, lease, sublet, offer, provision for use, or other placement in the stream of commerce of a new or used full-size baby crib on or after that date.

(2) Child care facilities, family child care homes, and places of public accommodation affecting commerce shall be required to comply with this part on [insert date 24 months after date of publication in the FEDERAL REGISTER], but this provision applies only to the offer or provision for use of cribs by child care facilities, family child care homes, and places of public accommodation affecting commerce and not the sale, resale, or other placement in the stream of commerce of cribs by these entities.

(c) **Definitions.** (1) *Full-size baby crib* means a bed that is:

   (i) Designed to provide sleeping accommodations for an infant;

   (ii) Intended for use in the home, in a child care
facility, a family child care home, or place of public accommodation affecting commerce; and

(iii) Within a range of ± 5.1 cm (± 2 in.) of the following interior dimensions: The interior dimensions shall be 71 ± 1.6 cm (28 ± \( \frac{1}{5} \) in.) wide as measured between the innermost surfaces of the crib sides and 133 ± 1.6 cm (52 \( \frac{1}{5} \) ± \( \frac{1}{5} \) in.) long as measured between the innermost surfaces of the crib end panels, slats, rods, or spindles. Both measurements are to be made at the level of the mattress support spring in each of its adjustable positions and no more than 5 cm (2 in.) from the crib corner posts or from the first spindle to the corresponding point of the first spindle at the other end of the crib. If a crib has contoured or decorative spindles, in either or both of the sides or ends, the measurement shall be determined from the largest diameter of the first turned spindle within a range of 10 cm (4 in.) above the mattress support spring in each of its adjustable positions, to a corresponding point on the first spindle or innermost surface of the opposite side of the crib.

(2) Place of public accommodation affecting commerce means any inn, hotel, or other establishment that provides lodging to transient guests, except that such term does not include an establishment treated as an apartment building
for purposes of any State or local law or regulation or an establishment located within a building that contains not more than five rooms for rent or hire and that is actually occupied as a residence by the proprietor of such establishment.

§ 1219.2 Requirements for full-size baby cribs.

(a) Except as provided in paragraph (b) of this section, each full-size baby crib shall comply with all applicable provisions of ASTM F 1169-10, Standard Consumer Safety Specification for Full-Size Baby Cribs, approved June 1, 2010. The Director of the Federal Register approves this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You may obtain a copy from ASTM International, 100 Bar Harbor Drive, PO Box 0700, West Conshohocken, PA 19428; telephone 610-832-9585; www.astm.org. You may inspect a copy at the Office of the Secretary, U.S. Consumer Product Safety Commission, Room 820, 4330 East West Highway, Bethesda, MD 20814, telephone 301-504-7923, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(b) Comply with the ASTM F 1169-10 standard with the
following additions or exclusions:

(1) Do not comply with section 6.12 of ASTM F 1169-10.

(2) Instead of complying with section 7.7.1 of ASTM F 1169-10, comply with the following:

(i) The spindle/slat static force test shall be performed with the spindle/slat assemblies removed from the crib and rigidly supported within 3 in. of each end of the upper and lower horizontal rails in a manner that shall not interfere with a spindle/slat deflecting under the applied force. For cribs incorporating foldable or moveable sides for purposes of easier access to the occupant, storage and/or transport, each side segment (portion of side separated by hinges for folding) shall be tested separately.

(ii) [Reserved]

2. Add part 1220 to read as follows:

PART 1220 - SAFETY STANDARD FOR NON-FULL-SIZE BABY CRIBS

Sec.

1220.1 Scope, compliance dates, and definitions.

1220.2 Requirements for non-full-size baby cribs.

§ 1220.1 Scope, compliance dates, and definitions.

(a) Scope. This part establishes a consumer product safety standard for new and used non-full-size baby cribs.

(b) Compliance dates. (1) Except as provided in paragraph (b)(2) of this section, compliance with this part 1220 shall be required on [insert date 6 months after date of publication in the FEDERAL REGISTER], and applies to the manufacture, sale, contract for sale or resale, lease, sublet, offer, provision for use, or other placement in the stream of commerce of a new or used non-full-size baby crib on or after that date.

(2) Child care facilities, family child care homes, and places of public accommodation affecting commerce shall be required to comply with this part on [insert date 24 months after date of publication in the FEDERAL REGISTER], but this provision applies only to the offer or provision for use of cribs by child care facilities, family child care homes, and places of public accommodation affecting commerce and not the sale, resale, or other placement in the stream of commerce of cribs by these entities.

(c) Definitions. (1) Non-full-size baby crib means a bed that is:

(i) Designed to provide sleeping accommodations for an
infant;

(ii) Intended for use in or around the home, for travel, in a child care facility, in a family child care home, in a place of public accommodation affecting commerce and other purposes;

(iii) Has an interior length dimension either greater than 139.7 cm (55 in.) or smaller than 126.3 cm (49 ¾ in.), or, an interior width dimension either greater than 77.7 cm (30 ¾ in.) or smaller than 64.3 cm (25 ¾ in.), or both;

(iv) Includes, but is not limited to, the following:

(A) Portable crib – a non-full-size baby crib designed so that it may be folded or collapsed, without disassembly, to occupy a volume substantially less than the volume it occupies when it is used.

(B) Crib pen – a non-full-size baby crib with rigid sides the legs of which may be removed or adjusted to provide a play pen or play yard for a child.

(C) Specialty crib – an unconventionally shaped (circular, hexagonal, etc.) non-full-size baby crib incorporating a special mattress or other unconventional components.

(D) Undersize crib – a non-full-size baby crib with an interior length dimension smaller than 126.3 cm (49 ¾ in.), or an interior width dimension smaller than 64.3 cm
(E) Oversize crib — a non-full-size baby crib with an interior length dimension greater than 139.7 cm (55 in.), or an interior width dimension greater than 77.7 cm (30 \( \frac{3}{4} \) in.), or both.

(v) Does not include mesh/net/screen cribs, nonrigidly constructed baby cribs, cradles (both rocker and pendulum types), car beds, baby baskets, and bassinets (also known as junior cribs).

(2) Play yard means a framed enclosure that includes a floor and has mesh or fabric sided panels primarily intended to provide a play or sleeping environment for children. It may fold for storage or travel.

(3) Place of public accommodation affecting commerce means any inn, hotel, or other establishment that provides lodging to transient guests, except that such term does not include an establishment treated as an apartment building for purposes of any State or local law or regulation or an establishment located within a building that contains not more than five rooms for rent or hire and that is actually occupied as a residence by the proprietor of such establishment.

§ 1220.2 Requirements for non-full-size baby cribs.
(a) Except as provided in paragraph (b) of this section, each non-full-size baby crib shall comply with all applicable provisions of ASTM F 406-10a, Standard Consumer Safety Specification for Non-Full-Size Baby Cribs/Play Yards, approved October 15, 2010. The Director of the Federal Register approves this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You may obtain a copy from ASTM International, 100 Bar Harbor Drive, PO Box 0700, West Conshohocken, PA 19428; telephone 610-832-9585; www.astm.org. You may inspect a copy at the Office of the Secretary, U.S. Consumer Product Safety Commission, Room 820, 4330 East West Highway, Bethesda, MD 20814, telephone 301-504-7923, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(b) Comply with the ASTM F 406-10a standard with the following additions or exclusions:

(1) Do not comply with sections 5.6.2 through 5.6.2.4 of ASTM F 406-10a.

(2) Do not comply with section 5.16.2 of ASTM F 406-10a.
(3) Do not comply with section 6.10 of ASTM F 406-10a.

(4) Do not comply with section 7, Performance Requirements for Mesh/Fabric Products, of ASTM F 406-10a.

(5) Instead of complying with section 8.10.1 of ASTM F 406-10a, comply with the following:

(i) The spindle/slat static force test shall be performed with the spindle/slat assemblies removed from the crib and rigidly supported within 3 in. of each end of the upper and lower horizontal rails in a manner that shall not interfere with a spindle/slat deflecting under the applied force. For cribs incorporating foldable or moveable sides for purposes of easier access to the occupant, storage and/or transport, each side segment (portion of side separated by hinges for folding) shall be tested separately.

(ii) [Reserved]

(6) Do not comply with sections 8.11 through 8.11.2.4 of ASTM F 406-10a.

(7) Do not comply with sections 8.12 through 8.12.2.2 of ASTM F 406-10a.


(9) Do not comply with sections 8.15 through 8.15.3.3 of ASTM F 406-10a.
(10) Do not comply with sections 8.16 through 8.16.3 of ASTM F 406-10a.

(11) Do not comply with section 9.3.2 through 9.3.2.4 of ASTM F 406-10a.

(12) Instead of complying with section 9.4.2.6 of ASTM F 406-10a, comply with the following warning requirement:

(i) Child can become entrapped and die when improvised netting or covers are placed on top of product. Never add such items to confine child in product.

(ii) [Reserved].

3. The authority citation for part 1500 is revised to read as follows:


4. In § 1500.18 remove paragraphs (a)(13) and (14).

Dated: December 12, 2010

Todd A. Stevenson, Secretary
U.S. Consumer Product Safety Commission