



UNITED STATES  
 CONSUMER PRODUCT SAFETY COMMISSION  
 4330 EAST WEST HIGHWAY  
 BETHESDA, MD 20814

This document has been electronically approved and signed.

**BALLOT VOTE SHEET**

Date: July 17, 2019

TO : The Commission  
 Alberta E. Mills, Secretary

THROUGH: Patricia M. Hanz, General Counsel  
 Mary T. Boyle, Executive Director

FROM : Patricia M. Pollitzer, Assistant General Counsel  
 Hyun S. Kim, Attorney

SUBJECT : ASTM’s Revisions to Safety Standard for Carriages and Strollers

BALLOT VOTE DATE: Tuesday, July 23, 2019

Staff is forwarding to the Commission for consideration a briefing memorandum recommending that the Commission issue a direct final rule updating the reference to the ASTM standard cited in the Commission’s rule for carriages and strollers, 16 CFR part 1227. Under the Consumer Product Safety Improvement Act of 2008, revised voluntary standards automatically are considered consumer product safety standards, unless the Commission determines and notifies the voluntary standards organization that the revised voluntary standard “does not improve the safety of the consumer product.” Staff recommends that the Commission allow the revised ASTM F833-19, *Standard Consumer Safety Specification for Carriages and Strollers*, to become the CPSC-mandated standard for carriages and strollers and publish a direct final rule that revises the reference in CPSC’s safety standard for carriages and strollers to refer to the revised ASTM standard for those products. A draft *Federal Register* notice for that purpose is attached.

Please indicate your vote on the following options:

- I. Approve publication of the attached document in the *Federal Register*, as drafted.

\_\_\_\_\_  
 (Signature)

\_\_\_\_\_  
 (Date)

II. Approve publication of the attached document in the *Federal Register*, with the specified changes.

---

---

---

---

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

III. Do not approve publication of the attached document in the *Federal Register*.

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

IV. Take other action specified below.

---

---

---

---

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

Attachment: Draft *Federal Register* notice, titled, “Revisions to Safety Standard for Carriages and Strollers”

[Billing Code 6355-01-P]

CONSUMER PRODUCT SAFETY COMMISSION

**[Docket No. CPSC-2013-0019]**

**16 CFR Part 1227**

**Revisions to Safety Standard for Carriages and Strollers**

**AGENCY:** Consumer Product Safety Commission.

**ACTION:** Direct final rule.

**SUMMARY:** In March 2014, the U.S. Consumer Product Safety Commission (CPSC) published a consumer product safety standard for carriages and strollers. The standard incorporated by reference the applicable ASTM voluntary standard. ASTM has since published two revisions to the voluntary standard for carriages and strollers. We are publishing this direct final rule revising the CPSC's mandatory standard for carriages and strollers to incorporate, by reference, the most recent version of the applicable ASTM standard.

**DATES:** The rule is effective on November 5, 2019, unless we receive significant adverse comment by **[insert date 30 days after publication in the FEDERAL REGISTER]**. If we receive timely significant adverse comments, we will publish notification in the *Federal Register*, withdrawing this direct final rule before its effective date. The incorporation by reference of the publication listed in this rule is approved by the Director of the Federal Register as of November 5, 2019.

**ADDRESSES:** You may submit comments, identified by Docket No. CPSC-2013-0019, by any of the following methods:

*Electronic Submissions:* Submit electronic comments to the Federal eRulemaking Portal at: <https://www.regulations.gov>. Follow the instructions for submitting comments. The CPSC does not accept comments submitted by electronic mail (e-mail), except through [www.regulations.gov](http://www.regulations.gov). The CPSC encourages you to submit electronic comments by using the Federal eRulemaking Portal, as described above.

*Written Submissions:* Submit written submissions in the following way: Mail/Hand delivery/Courier (for paper, disk, or CD-ROM submissions), preferably in five copies, to: Division of the Secretariat, Consumer Product Safety Commission, Room 820, 4330 East West Highway, Bethesda, MD 20814; telephone (301) 504-7923.

*Instructions:* All submissions received must include the agency name and docket number for this proposed rulemaking. All comments received may be posted without change, including any personal identifiers, contact information, or other personal information provided, to: <https://www.regulations.gov>. Do not submit confidential business information, trade secret information, or other sensitive or protected information that you do not want to be available to the public. If furnished at all, such information should be submitted in writing.

*Docket:* For access to the docket to read background documents or comments received, go to: [www.regulations.gov](http://www.regulations.gov), and insert the docket number, CPSC-2013-0019, into the “Search” box, and follow the prompts.

**FOR FURTHER INFORMATION CONTACT:** Keysha Walker, Compliance Officer, Office of Compliance and Field Operations, Consumer Product Safety Commission, 4330 East West Highway, Bethesda, MD 20814-4408; telephone: 301-504-6820; email: [kwalker@cpsc.gov](mailto:kwalker@cpsc.gov).

**SUPPLEMENTARY INFORMATION:**

**A. Background**

*1. Statutory Authority*

Section 104(b)(1)(B) of the Consumer Product Safety Improvement Act (CPSIA), also known as the Danny Keysar Child Product Safety Notification Act, 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 CPSIA also sets forth a process for updating CPSC’s durable infant or toddler standards when the voluntary standard upon which the CPSC standard was based is changed. Section 104(b)(4)(B) of the CPSIA provides that if an organization revises a standard that has been adopted, in whole or in part, as a consumer product safety standard under this subsection, it shall notify the Commission. In addition, the revised voluntary standard shall be considered to be a consumer product safety standard issued by the Commission under section 9 of the Consumer Product Safety Act (15 U.S.C. 2058), effective 180 days after the date on which the organization notifies the Commission (or such later date specified by the Commission in the Federal Register) unless, within 90 days after receiving that notice, the Commission notifies the organization that it has determined that the proposed revision does not improve the safety of the consumer product covered by the standard and that the Commission is retaining the existing consumer product safety standard.

*2. The Carriage and Stroller Standard*

On March 10, 2014, the Commission published a final rule issuing a standard for carriages and strollers that incorporated by reference the standard in effect at that time, ASTM F833-13b, with a modification to address potential hazardous openings created by adjustable grab bar/tray and foot rest configurations. 79 FR 13208. The standard was codified in the Commission's regulations at 16 CFR part 1227. The ASTM standard was revised in 2015, and the Commission incorporated by reference the revised standard, ASTM F833-15, without modification, as the mandatory standard for carriages and strollers on June 9, 2016. 81 FR 37128. On May 9, 2019, ASTM notified the Commission that it has revised ASTM's standard for carriages and strollers; the current ASTM standard is ASTM F833-19. The CPSC reviewed the changes between the current CPSC standard, 16 CFR part 1227 and ASTM F833-19.

**B. Revisions to the ASTM Standard**

The ASTM standard for carriages and strollers establishes performance requirements, test methods, and labeling requirements to address hazards to children associated with carriages and strollers including stability, brakes, restraint systems, latches and folding mechanisms, structural integrity, cords, wheel detachments, and entrapment.

There are several differences between 16 CFR part 1227 and the revised version of the standard, ASTM F833-19, Standard Consumer Safety Performance Specification for Carriages and Strollers, approved March 15, 2019. We summarize the differences and the CPSC's assessment of the revisions below.

*Tray/Grab Bar Protective Covering.* The 2019 version of the ASTM standard adds a new definition, performance requirement, test method, and warning for a “tray/grab bar protective covering” (Sections 3.1.25, 5.14, 7.19, 8.3.). A “tray/grab bar protective covering” is defined as a “component designed and intended as a means to prevent exposure of any underlying *accessible foam* material.” Carriages and strollers that have accessible foam trays/grab bars are required to have a protective covering that can withstand 15 lbf without exposing the underlying foam. If the covering is removable, the foam is required to have a warning that states: “WARNING Children can choke on foam. Only use with the cover installed.”

CPSC staff’s review of these provisions shows that the additional language will help address incidents of children biting foam on stroller arm bars, which poses a choking hazard. CPSC issued two recalls related to this hazard in July 2015<sup>1</sup> and in January 2016.<sup>2</sup> The revised language improves the safety of carriages and strollers because the addition of a physical barrier decreases the likelihood that a child will have access to foam on the tray/grab bar, which reduces their exposure to the choking hazard.

*Static Load Test.* The 2019 version of the ASTM standard adds a note specifying that an unacceptable condition identified by the static load test methods includes a “failure to support the test weight” in addition to tip over, collapse of the product or a component of the product, sharp edges or points and small parts. (NOTE 5, referenced in Section 6.2.5). If a stroller fails to support the test weight during the static load test (Section 7.3), the stroller is considered to have failed the static load test. Previous versions of the voluntary standard did not state this explicitly as a failure mode. CPSC

---

<sup>1</sup> See <https://www.cpsc.gov/Recalls/2015/UPPAbaby-Recalls-Strollers-and-RumbleSeats>.

<sup>2</sup> See <https://www.cpsc.gov/Recalls/2016/Britax-Recalls-Strollers-and-Replacement-Top-Seats/>.

staff's review shows that the revision improves the safety of carriages and strollers because a stroller that fails to support the test weight, may pose a hazard to a child occupant.

*Change in units for static load from lbf (N) to lb (kg).* The 2019 version of the ASTM standard changes the units for the static load in Section 6.2.1 and Section 6.2.4 in the performance requirements, from force units, lbf (N), to mass units, lb (kg). The static load test method, which is not changed in the 2019 version of the standard, specifies that the static load is a mass placed on the product (Section 7.3). CPSC staff determines that the revised language accurately reflects the loading described in the test method, but does not change the test method. Accordingly, this change is neutral regarding safety.

*Change in ASTM standard language.* The 2019 version of the ASTM standard adds language (Section 1.5), stating that ASTM developed the standard in accordance with principles recognized by the World Trade Organization. This change is neutral regarding safety.

*Correction to the unit conversion for the head probe.* The 2019 version of the ASTM standard corrects an inaccurate conversion of 8 inches to millimeter ("200 mm" to "203 mm") for the FIG. 10 Head Probe. The correction was also made to the Rationale for Fig. 10 in Section X1.3. CPSC staff's review shows that this correction does not affect testing because there is no change to the test fixture. This change is neutral regarding safety.

*Editorial revisions.* The 2019 version of the ASTM standard includes several non-substantive editorial changes that do not affect the safety of carriages and strollers, such



as formatting, spacing, and spelling changes (*i.e.*, “5<sup>th</sup>” to “5<sup>th</sup>”, “9N” to “9 N”, “tray(s)or” to “tray(s) or” and “competed” to “completed”).

*Assessment of the revisions to the ASTM standard.* Under section 104 of the CPSIA, unless the Commission determines that ASTM’s revision “does not improve the safety of the consumer product covered by the standard,” ASTM F833-19 will become the new mandatory standard for carriages and strollers. As discussed above, based on the CPSC staff’s review, the Commission believes that certain revisions are neutral regarding safety. However, other revisions will improve the safety of standard, including the addition of a performance requirement for a tray/grab bar protective covering and the addition of a failure mode to static load tests. Therefore, the revised ASTM standard for carriages and strollers will become the new CPSC standard 180 days after the date the CPSC received notification of the revision from ASTM, November 5, 2019. This rule revises the incorporation by reference at 16 CFR part 1227, to reference the ASTM standard, ASTM F833-19.

**C. Incorporation by Reference**

The Office of the Federal Register (OFR) has regulations concerning incorporation by reference. 1 CFR part 51. Under these regulations, agencies must discuss, in the preamble to the final rule, ways that the materials the agency incorporates by reference are reasonably available to interested persons and how interested parties can obtain the materials. In addition, the preamble to the final rule must summarize the material. 1 CFR 51.5(b).

In accordance with the OFR’s requirements, section B of this preamble summarizes the major provisions of the ASTM F833-19 standard that the Commission

incorporates by reference into 16 CFR part 1227. The standard is reasonably available to interested parties, and interested parties may purchase a copy of the standard from ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959 USA; phone: 610-832-9585; www.astm.org. A copy of the standard can also be inspected at CPSC's Division of the Secretariat, U.S. Consumer Product Safety Commission, Room 820, 4330 East West Highway, Bethesda, MD 20814, telephone 301-504-7923.

**D. The Congressional Review Act**

The Congressional Review Act (CRA; 5 U.S.C. 801-808) states that, before a rule may take effect, the agency issuing the rule must submit the rule, and certain related information, to each House of Congress and the Comptroller General. 5 U.S.C. 801(a)(1). The submission must indicate whether the rule is a "major rule." The CRA states that the Office of Information and Regulatory Affairs (OIRA) determines whether a rule qualifies as a "major rule." Pursuant to the CRA, OIRA designated this rule as not a "major rule," as defined in 5 U.S.C. 804(2). In addition, to comply with the CRA, the Office of the General Counsel will submit the required information to each House of Congress and the Comptroller General.

**E. Certification**

Section 14(a) of the CPSA requires 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. As noted in the preceding discussion, standards issued under section 104(b)(1)(B) of the CPSIA are “consumer product safety standards.” Thus, they are subject to the testing and certification requirements of section 14 of the CPSA.

Because carriages and strollers are children’s products, samples of these products must be tested by a third party conformity assessment body whose accreditation has been accepted by the Commission. These products also must comply with all other applicable CPSC requirements, such as the lead content requirements in section 101 of the CPSIA, the phthalates prohibitions 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(d) of the CPSIA.

#### **F. Notice of Requirements**

In accordance with section 14(a)(3)(B)(iv) of the CPSIA, the Commission has previously published a notice of requirements (NOR) for accreditation of third party conformity assessment bodies for testing carriages and strollers (79 FR 13208 (March 10, 2014)). The NORs provided the criteria and process for our acceptance of accreditation of third party conformity assessment bodies for testing carriages and strollers to 16 CFR part 1227. The NORs are listed in the Commission’s rule, “Requirements Pertaining to Third Party Conformity Assessment Bodies.” 16 CFR part 1112.

One of the revisions discussed above adds a test for protective coverings on accessible foam trays/grab bars. The test involves clamping the protective covering with a ¾-inch diameter clamp, applying 15 lbf, and visually inspecting whether foam has been

exposed. If the protective covering is removable, test labs will need to verify that the warning is present and meets the requirements in the standard. Test laboratories that test children's products likely already own the 3/4-inch diameter clamp because it is used for testing in other standards, including ASTM F963 (Consumer Safety Specification for Toy Safety). The testing and visual inspection of tray/grab bar covers would not significantly change how testing is conducted for carriages and strollers.

In addition, a visual inspection is required to assess whether a stroller supports the test weight for static load tests. However, this is one of several conditions assessed by the static load test methods to ensure that no unacceptable conditions are identified. There is no change to the equipment or performance of the static load testing. Accordingly, this addition would not significantly change how these tests are conducted for carriages and strollers.

The other revisions to the voluntary standard merely clarify the existing standard and will not change existing test methods. Based on CPSC staff's review, the Commission concludes that revising the reference to ASTM F833-19 for the carriage and stroller standard will not necessitate any significant change in the way that third party conformity assessment bodies test these products for compliance to CPSC standards. Therefore, the Commission considers the existing accreditations that the Commission has accepted for testing to this standard also to cover testing to the revised standard. The existing NOR for this standards will remain in place, and CPSC-accepted third party conformity assessment bodies are expected to update the scope of the testing laboratories' accreditation to reflect the revised standard in the normal course of renewing their accreditation.

**G. Direct Final Rule Process**

The Commission is issuing this rule as a direct final rule. Although the Administrative Procedure Act (APA) generally requires notice and comment rulemaking, section 553 of the APA provides an exception when the agency, for good cause, finds that notice and public procedure are “impracticable, unnecessary, or contrary to the public interest.” 5 U.S.C. 553(b)(B). The Commission concludes that when the Commission updates a reference to an ASTM standard that the Commission has incorporated by reference under section 104(b) of the CPSIA, notice and comment is not necessary.

Under the process set out in section 104(b)(4)(B) of the CPSIA, when ASTM revises a standard that the Commission has previously incorporated by reference as a Commission standard for a durable infant or toddler product under section 104(b)(1)(b) of the CPSIA, that revision will become the new CPSC standard, unless the Commission determines that ASTM’s revision does not improve the safety of the product. Thus, unless the Commission makes such a determination, the ASTM revision becomes CPSC’s standard by operation of law. The Commission is allowing ASTM F833-19 to become CPSC’s new standard. The purpose of this direct final rule is merely to update the reference in the Code of Federal Regulations so that it accurately reflects the version of the standard that takes effect by statute. Public comment will not impact the substantive changes to the standard or the effect of the revised standard as a consumer product safety standard under section 104(b) of the CPSIA. Under these circumstances, notice and comment is not necessary. In Recommendation 95-4, the Administrative Conference of the United States (ACUS) endorsed direct final rulemaking as an

appropriate procedure to expedite promulgation of rules that are noncontroversial and that are not expected to generate significant adverse comment. *See* 60 FR 43108 (August 18, 1995). ACUS recommended that agencies use the direct final rule process when they act under the “unnecessary” prong of the good cause exemption in 5 U.S.C. 553(b)(B). Consistent with the ACUS recommendation, the Commission is publishing this rule as a direct final rule because we do not expect any significant adverse comments.

Unless we receive a significant adverse comment within 30 days, the rule will become effective on November 5, 2019. In accordance with ACUS’s recommendation, the Commission considers a significant adverse comment to be one where the commenter explains why the rule would be inappropriate, including an assertion challenging the rule’s underlying premise or approach, or a claim that the rule would be ineffective or unacceptable without change.

Should the Commission receive a significant adverse comment, the Commission would withdraw this direct final rule. Depending on the comments and other circumstances, the Commission may then incorporate the adverse comment into a subsequent direct final rule or publish a notice of proposed rulemaking, providing an opportunity for public comment.

#### **H. Regulatory Flexibility Act**

The Regulatory Flexibility Act (RFA) generally requires that agencies review proposed and final rules for their potential economic impact on small entities, including small businesses, and prepare regulatory flexibility analyses. 5 U.S.C. 603 and 604. The RFA applies to any rule that is subject to notice and comment procedures under section 553 of the APA. *Id.* As explained above, the Commission has determined that notice and

comment is not necessary for this direct final rule. Thus, the RFA does not apply. We also note the limited nature of this document, which updates the incorporation by reference to reflect the mandatory CPSC standard that takes effect under section 104 of the CPSIA.

**I. Paperwork Reduction Act**

The standard for carriages and strollers contains information collection requirements under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520). The revisions made no changes to that section of the standard. Thus, the revisions will not have any effect on the information collection requirements related to the standard.

**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, so no environmental assessment or environmental impact statement is required.

**K. Preemption**

Section 26(a) of the CPSA, 15 U.S.C. 2075(a), provides that where a consumer product safety standard 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 CPSC for an exemption from this preemption under certain

circumstances. 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.

**L. Effective Date**

Under the procedure set forth in section 104(b)(4)(B) of the CPSIA, when a voluntary standard organization revises a standard upon which a consumer product safety standard was based, the revision becomes the CPSC standard within 180 days of notification to the Commission, unless the Commission determines that the revision does not improve the safety of the product, or the Commission sets a later date in the *Federal Register*. The Commission has not set a different effective date. Thus, in accordance with this provision, this rule takes effect 180 days after we received notification from ASTM of revision to this standard. As discussed in the preceding section, this is a direct final rule. Unless we receive a significant adverse comment within 30 days, the rule will become effective on November 5, 2019.

**List of Subjects in 16 CFR Part 1227**

Consumer protection, Imports, Incorporation by reference, Infants and children, Law enforcement, Safety, Toys.

For the reasons stated above, the Commission amends Title 16 CFR chapter II as follows:

**PART 1227 – SAFETY STANDARD FOR CARRIAGES AND STROLLERS**

1. The authority citation for part 1227 continues to read as follows:



**Authority:** The Consumer Product Safety Improvement Act of 2008, Pub. L. 110-314, Sec. 104, 122 Stat. 3016 (August 14, 2008); Pub. L. 112-28, 125 Stat. 273 (August 12, 2011).

2. Revise § 1227.2 to read as follows:

**§ 1227.2 Requirements for carriages and strollers.**

Each carriage and stroller shall comply with all applicable provisions of ASTM F833-19, Standard Consumer Safety Performance Specification for Carriages and Strollers, approved March 15, 2019. The Director of the Federal Register approves the incorporation by reference listed in this section in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You may obtain a copy of this ASTM standard from ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959 USA; phone: 610-832-9585; [www.astm.org](http://www.astm.org). You may inspect a copy at the Division of the Secretariat, 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: [www.archives.gov/federal-register/cfr/ibr-locations.html](http://www.archives.gov/federal-register/cfr/ibr-locations.html).

Dated: \_\_\_\_\_

---

Alberta E. Mills, Secretary  
U.S. Consumer Product Safety Commission



UNITED STATES  
CONSUMER PRODUCT SAFETY COMMISSION  
4330 EAST WEST HIGHWAY, BETHESDA, MD 20814

## Memorandum

July 17, 2019

TO: The Commission  
Alberta E. Mills, Secretary

THROUGH: Patricia M. Hanz, General Counsel  
Mary T. Boyle, Executive Director  
DeWane Ray, Deputy Executive Director for Safety Operations

FROM: Duane E. Boniface, Acting Assistant Executive Director  
Office of Hazard Identification and Reduction

Kristen Talcott, Project Manager  
Division of Human Factors  
Directorate for Engineering Sciences

SUBJECT: Notice of Revision to the Carriage and Stroller Standard, 16 CFR Part  
1227

### I. INTRODUCTION

The Danny Keysar Child Product Safety Notification Act, *i.e.*, section 104 of the Consumer Product Safety Improvement Act of 2008 (CPSIA), instructs voluntary standards organizations, such as ASTM International (ASTM), to notify the U.S. Consumer Product Safety Commission (CPSC) of revisions to voluntary standards that form the basis for a consumer product safety standard promulgated by the Commission:

*(B) COMMISSION ACTION ON REVISED VOLUNTARY STANDARD - If an organization revises a standard that has been adopted, in whole or in part, as a consumer product safety standard under this subsection, it shall notify the Commission. The revised voluntary standard shall be considered to be a consumer product safety standard issued by the Commission under section 9 of the Consumer Product Safety Act (15 U.S.C. 2058), effective 180 days after the date on which the organization notifies the Commission (or such later date specified by the Commission in the Federal Register) unless, within 90 days after receiving that notice, the Commission notifies the organization that it has determined that the proposed revision does not improve the safety of the consumer product covered by the standard and that the Commission is retaining the existing consumer product safety standard.*

On March 10, 2014, the Commission adopted ASTM F833 – 13b, *Standard Consumer Safety Specification for Carriages and Strollers*, with one modification, codified under 16 CFR part 1227 (CPSC mandatory standard). The CPSC mandatory standard was updated once previously, in 2016, to ASTM F833 – 15, without modification. On May 9, 2019, ASTM officially notified the CPSC that it had published a revised 2019 version of the voluntary standard. ASTM approved F833 – 19 on March 15, 2019, and published it in April 2019. This memorandum outlines the differences between 16 CFR part 1227 and ASTM F833 – 19. The memorandum also discusses whether any changes would affect how a third party assessment body (also known as a testing laboratory) would test carriages and strollers.

Staff recommends that the Commission determine that ASTM’s revision to the standard for carriages and strollers improves the safety of such products and incorporate the revised standard under 16 CFR part 1227.

## II. DISCUSSION

### A. *Review of Differences Between 16 CFR Part 1227 and ASTM F833 – 19*

ASTM F833 – 19 is the only revision to the voluntary standard since publication of ASTM F833 – 15, which the Commission incorporated by reference in the CPSC mandatory standard. The differences between the two versions of the voluntary standard are summarized below. Appendix A provides the differences in wording between the two versions, referencing the numbering below.

#### 1. Substantive Changes

##### a. **Addition of a definition, requirement, test method, and warning for a “tray/grab bar protective covering”**

The 2019 version of the ASTM standard adds a definition, requirement, test method, and warning for a “tray/grab bar protective covering” (Sections 3.1.25, 5.14, 7.19, 8.3.). A “tray/grab bar protective covering” is defined as a “component designed and intended as a means to prevent exposure of any underlying *accessible foam* material.” Carriages and strollers that have accessible foam trays/grab bars are required to have a protective covering that can withstand 15 lbf without exposing the underlying foam. If the covering is removable, the foam is required to have a warning that states: “WARNING Children can choke on foam. Only use with the cover installed.”

These provisions in the 2019 version of the standard address incidents of children biting foam on stroller arm bars, which poses a choking hazard. The incidents involved stroller arm bars with uncovered foam that was accessible to children seated in the stroller. CPSC issued two recalls related to this hazard, one in July 2015,<sup>1</sup> and the other in January 2016.<sup>2</sup> Staff

---

<sup>1</sup> CPSC (2015) “UPPAbaby Recalls Strollers and Rumble Seats Due to Choking Hazard.” Available online at: <https://www.cpsc.gov/Recalls/2015/UPPAbaby-Recalls-Strollers-and-RumbleSeats>. Accessed on May 29, 2019.

concludes that the revised language improves the safety of carriages and strollers because the addition of a physical barrier decreases the likelihood that a child will have access to foam on the tray/grab bar, which reduces their exposure to the choking hazard.

**b. Addition of “failure to support test weight” as a failure mode for static load tests**

The 2019 version of the ASTM standard adds “failure to support test weight” as an unacceptable condition that may be identified by the static load test methods (NOTE 5, referenced in Section 6.2.5). This means that if a carriage or stroller fails to support the test weight during the static load test (Section 7.3), it is considered to have failed the static load test. Staff concludes that the revised language improves the safety of carriages and strollers because a product that fails to support the test weight may pose a hazard to a child occupant. Previous versions of the voluntary standard did not state this explicitly as a failure mode.

**2. Non-Substantive Changes**

**a. Change in units for static load from lbf (N) to lb (kg)**

The 2019 version of the ASTM standard changes the units for the static load in Section 6.2.1 and Section 6.2.4 in the performance requirements from force units, lbf (N), to mass units, lb (kg). The static load test method, which is not changed in the 2019 version of the standard, specifies that the static load is a mass placed on the product (Section 7.3). The revised language in the 2019 version of the standard, therefore, accurately reflects the loading described in the test method. Staff concludes that the revised language does not affect safety because it is a clarification that does not change the requirement or test method. Because there is no change to the test method, this change also does not affect testing.

**b. Change in ASTM standard language**

The 2019 version of the ASTM standard adds language (Section 1.5), which ASTM intends to add to all of its standards, stating that ASTM developed the standard in accordance with principles recognized by the World Trade Organization. Staff concludes that adding this text does not affect the safety of carriages and strollers.

**c. Correction to the unit conversion for the head probe**

The 2019 version of the ASTM standard corrects an inaccurate conversion of 8 inches to millimeter (“200 mm” to “203 mm”) for the FIG. 10 Head Probe. The correction was also made to the Rationale for Fig. 10 in Section X1.3. The standard’s scope in Section 1.3, which is not changed in the 2019 version of the standard, states: “[t]he values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.” Based on this language, staff concludes that this correction does not affect the safety of carriages and strollers because there was no change to the value in inch units. This change also does not affect testing because there is no change to the test fixture.

---

<sup>2</sup> CPSC (2016) “Britax Recalls Strollers and Replacement Top Seats Due to Choking Hazard.” Available online at: <https://www.cpsc.gov/Recalls/2016/Britax-Recalls-Strollers-and-Replacement-Top-Seats/>. Accessed on May 29, 2019.

#### **d. Editorial revisions to formatting, spacing, and spelling**

The 2019 version of the ASTM standard makes a formatting change in the Parking Brake Requirements in Section 6.1.1 (“5<sup>th</sup>” to “5<sup>th</sup>”), spacing changes in the Buckle Release Test Method in Section 7.5.5.1 (“9N” to “9 N”) and the Testing Tray/Grab Bar Stop Positions in Section 7.12.2.5 (“tray(s)or” to “tray(s) or”), and a spelling change in the Rationale in Section X1.19 (“competed” to “completed”). Staff concludes that these changes do not affect the safety of carriages and strollers because they are editorial revisions.

#### **B. Summary of the Revised Standard**

Staff concludes that the above-noted revisions in ASTM F833 – 19 are neutral or constitute improvements to the safety of carriages and strollers. Under Section 104(b)(4)(B), unless the Commission determines that ASTM’s revision “does not improve the safety of the consumer product covered by the standard,” ASTM F833 – 19 will become the new mandatory standard for carriages and strollers.

Based on staff’s review, staff recommends that the Commission allow the revised standard, ASTM F833 – 19, to be considered CPSC’s mandatory consumer product safety standard for carriages and strollers. Staff also recommends that the Commission issue a direct final rule to revise 16 CFR part 1227 to reference the 2019 version of the ASTM voluntary standard.

#### **C. Effect of the Changes on Third Party Testing**

Of the changes noted above, the two substantive changes: (1) the addition of a definition, requirement, test method, and warning for a “tray/grab bar protective covering,” and (2) the addition of “failure to support test weight” as a failure mode for static load tests, would affect how a test laboratory conducts the testing of carriages and strollers. The remaining four non-substantive changes should not affect how a test laboratory conducts its testing of carriages and strollers.

The addition of a definition, requirement, test method, and warning for a “tray/grab bar protective covering” will add a test for protective coverings on accessible foam trays/grab bars. The test involves clamping the protective covering with a ¾-inch diameter clamp, applying 15 lbf, and visually inspecting whether foam has been exposed. It is likely that test labs will already own the ¾-inch diameter clamp because it is used for testing in other standards, including ASTM F963 – 17, *Standard Consumer Safety Specification for Toy Safety*, and ASTM F977 – 18, *Standard Consumer Safety Specification for Infant Walkers*. If the protective covering is removable, test labs will need to verify that the warning is present and meets the requirements in the standard. The addition of “failure to support test weight” as a failure mode for static load tests will affect testing by adding a condition that must be checked at the conclusion of testing. However, there is no change to the equipment or performance of the static load test. Overall, staff does not expect that the third party testing costs for suppliers will change significantly.

The notice of requirements (NOR) provides the criteria and process for the Commission’s acceptance of accreditation of third party conformity assessment bodies for strollers and

carriages in 16 CFR part 1227 (which incorporated ASTM F833 – 15). The NORs are listed in the Commission’s rule, “Requirements Pertaining to Third Party Conformity Assessment Bodies.” 16 CFR part 1112. The effect on test laboratories is not expected to be substantial. Therefore, staff recommends that the Commission consider the existing accreditations that have been accepted for testing to this standard to also cover testing to the revised standard. In this case, the existing NOR for this standard will remain in place, and CPSC-accepted third party conformity assessment bodies would be expected to update the scope of the testing laboratories’ accreditation to reflect the revised standard in the normal course of renewing their accreditation. If the Commission approves the draft direct final rule, CPSC staff will notify all CPSC-accepted laboratories by direct email and provide links to the *Federal Register* notice to explain the changes to the standard and the effective date.

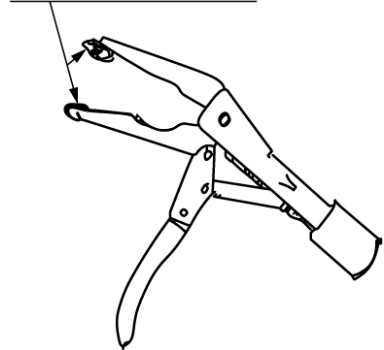
#### ***D. Effective Date***

According to section 104(b) (4)(B) of the CPSIA, unless the Commission notifies an organization that it has determined that a proposed voluntary standard revision does not improve the safety of a consumer product covered by the standard and that the Commission is retaining the existing standard, the revised voluntary standard will become effective as the CPSC mandatory standard 180 days after the date on which an organization notifies the Commission of the revision, or a later date that the Commission specifies in the *Federal Register*. In the case of ASTM F833 – 19, the revised voluntary standard will become effective as the CPSC mandatory standard on November 5, 2019, unless the Commission specifies a later date. JPMA typically allows 6 months for products in their certification program to shift to a new voluntary standard once that new voluntary standard is published. Therefore, juvenile product manufacturers are accustomed to adjusting to new voluntary standards within this time frame. ASTM F833 – 19 was approved on March 15, 2019, and published in April 2019; accordingly, by November 5, 2019, manufacturers should already be producing products that meet this standard. Staff concludes that there should be no issues with an effective date of November 5, 2019 for the CPSC mandatory standard.

### **III. RECOMMENDATIONS**

Staff recommends that the Commission allow ASTM F833 – 19 to become the CPSC mandatory standard for carriages and strollers and approve publication of a direct final rule in the *Federal Register* to revise the reference to the voluntary standard, ASTM F833 – 19. Specifically, staff recommends that the Commission not make a determination that the revision does not improve the safety of carriages and strollers. If the Commission allows this revision, the revised standard will become effective as the mandatory standard on November 5, 2019.

**Appendix A: Differences Between ASTM F833 – 15 and ASTM F833 – 19**  
 (Underlined text indicates new language; ~~strikeout~~ text indicates removed language)

#	Section in Standard	F833 – 15 vs. F833 – 19 (underline represents new text, strikeouts represent removed text)
1.a	3.1.25 (Definitions of Terms Specific to This Standard)	<u>3.1.25 tray/grab bar protective covering, n—component designed and intended as a means to prevent exposure of any underlying accessible foam material. Examples include, but are not limited to woven, knit, coated, laminated, extruded, or calendered textile-based materials and leathers.</u>
	5.14 (General Requirements)	<u>5.14 Tray/Grab Bar Protective Covering Requirement—Trays/grab bars that are accessible and forward of the occupant shall meet any one of the following:</u> <u>5.14.1 The tray/grab bar does not contain foam material.</u> <u>5.14.2 The tray/grab bar covering prevents the underlying foam material from being exposed when tested per 7.19.</u>
	7.19 (Test Methods)	<u>7.19 Tray/Grab Bar Protective Covering Removal Test Method:</u> <u>7.19.1 If the covering is removable, install the tray/grab bar protective covering per the manufacturer’s instructions on the tray/grab bar.</u> <u>7.19.2 Attach a force gauge to the protective covering by means of a clamp such as the one shown in Fig. 36. This test shall be considered a pass if the tray/grab bar protective covering material cannot be grasped between the thumb and forefinger of the test personnel sufficient for clamping by the ¾ in. (19-mm) diameter washer jaws.</u> <u>7.19.3 The clamp device shall only attach to the tray/grab bar protective covering and not attach to the underlying foam under the cover or to attachment devices such as zippers or Velcro tabs.</u> <u>7.19.4 Gradually apply a 15-lbf (67-N) force in the direction that is most likely to expose the foam under the covering over a 5-s period and hold for an additional 10 s.</u> <u>7.19.5 Visually inspect if the foam has become uncovered.</u>  BRAZE ¾ in. Dia. PLAIN STL WASHER TO JAW TIPS  <u>FIG. 36 Three-quarter-inch (¾-in. (19-mm)) Diameter Clamp</u>
8.3 (Marking and Labeling)	<u>8.3 Tray/grab bar with a removable protective covering shall have a warning located on the foam that addresses the following at a minimum:</u> <u>△WARNING Children can choke on foam. Only use with cover installed.</u>	
1.b	NOTE 5 (Static Load)	NOTE 5—For the purpose of this specification, the unacceptable conditions that might be identified by the static load test methods shall be <del>failure to support the test weight, tip over, collapse of the product or a component of the product, sharp edges or points, and small parts.</del>
2.a	6.2.1 (Static)	6.2.1 A carriage shall support a static load of <del>50 lbf (222 N)]b</del> <u>22.7 kg</u> when placed in

	Load)	the approximate center of the area intended to support the infant occupant.
	6.2.4 (Static Load)	6.2.4 A combination unit of a car seat on a stroller shall support a static load of 50 <del>lb</del> <del>(222 N)</del> <u>lb (22.7 kg)</u> when placed in the approximate center of the area intended to support the occupant.
2.b	1.5 (Scope)	<p>1.4 The following precautionary caveat pertains only to the test method portion, Section 7, of this consumer safety specification:</p> <p><i>This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and <del>health</del> environmental practices and determine the applicability of regulatory limitations prior to use.</i></p> <p><u>1.5 This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.</u></p>
2.c	FIG. 10 (Passive Containment/Foot Opening)	<p><del>8.0 in. (200 mm) hollow sphere</del>  <u>8.0-in. (203-mm) hollow sphere</u>  Material: ABS  Weight: 5 lb (2.3 kg)  FIG. 10 Head Probe</p>
	X1.3 (Rationale)	X1.3 <i>Rationale for Fig. 10</i> —The 5 lb (2.3 kg) weight is to allow for soft goods to compress. The 8 in. <del>(200)</del> <u>(203 mm)</u> measurement is the 95th percentile tip-of-chin to back-of-head of 13 month old child.
2.d	6.1.1 (Parking Brake Requirements)	6.1.1 A parking brake shall be provided on the unit. Each parking brake shall remain engaged during the test as specified in 7.6. Each parking brake shall prevent the braked wheel(s) from rotating more than 90° during the <del>5th</del> <u>5<sup>th</sup></u> test cycle specified in 7.6.
	7.5.5.1 (Buckle Release Test Method)	<p>7.5.5.1 <i>Buckle Pre-load:</i></p> <p>(1) <i>Single Latch Plate Buckles</i> (Fig. 19a)—Place the buckle on a hard, flat horizontal surface shaped so that it does not impede the release when being tested. Preload the strap ends of the buckle with 2 lb <del>(9N)</del> <u>(9 N)</u> in opposing directions away from the buckle.</p> <p>(2) <i>Double Latch Plate Buckles</i> (Fig. 19b)—Place the buckle on a hard, flat horizontal surface shaped so that it does not impede the release when being tested. Preload the strap ends of the buckle with 2 lb <del>(9N)</del> <u>(9 N)</u> in opposing directions away from the buckle. Latch plates that are removed from the buckle in the same direction shall be loaded equally so that the total load is 2 lb (9 N) in the direction away from the buckle.</p>
	7.12.2.5 (Testing Tray/Grab Bar Stop Positions)	7.12.2.5 If necessary, reattach/reposition the <del>tray(s) or tray(s) or</del> grab bar(s) to the stop position being evaluated in 7.12.2.4. Position any adjustable features (that is, calf supports, foot rests, etc.) that may affect the bounded opening(s), to create the maximum opening(s) size.
	X1.19 (Rationale)	X1.19 <i>Rationale for 7.15.2</i> —Products are evaluated the last $\frac{1}{3}$ of travel for a predefined access zone. Based on the incident data distributed by the CPSC, the task group hypothesized that the last $\frac{1}{3}$ of travel is considered the most hazardous condition due to opportunity for an anxious child to climb into the stroller and begin adjusting their body for a comfortable fit while the caregiver is preoccupied with the final stages of erecting the stroller. At that moment in time the child may be in a seated position with their hands vulnerable to scissoring, shearing and pinching within the access zone while the final stages of stroller setup are <del>completed</del> <u>completed</u> . Although this theory does not fit all scenarios or cover all the stroller designs and mechanisms on the market today, it does address those folds that were involved in the incidents consequently representing the vast majority of types of folds at the time this requirement was created.