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

Memorandum

Date:	November 25, 2020
TO:	The Commission Alberta E. Mills, Secretary
THROUGH:	Mary T. Boyle, Executive Director John G. Mullan, General Counsel
FROM:	Patricia L. Edwards, Voluntary Standards Coordinator Office of Hazard Identification and Reduction
SUBJECT:	Voluntary Standards Activities Fiscal Year 2020 Annual Report

Attached is U.S. Consumer Product Safety Commission (CPSC) staff's Fiscal Year 2020 (FY 2020) Annual Voluntary Standards Tracking Activities Report (VSTAR), covering the period from October 1, 2019 through September 30, 2020. If you have any questions, please contact Patricia Edwards at: pedwards@cpsc.gov.

VOLUNTARY STANDARDS TRACKING ACTIVITY REPORT

FY 2020 ANNUAL REPORT
(October 1, 2019–September 30, 2020)

U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway, Bethesda, MD 20814

This report was prepared by CPSC staff and has not been reviewed or approved by, and may not necessarily reflect the views of, the Commission

Voluntary Standards Activities
October 1, 2019–September 30, 2020

SUMMARY

Voluntary standards play an important role at the U.S. Consumer Product Safety Commission (CPSC). Under some of CPSC's statutes, if a relevant voluntary standard addresses the risk of injury that a consumer product presents, the Commission could issue a mandatory standard, but only if the voluntary standard is not likely to adequately reduce the risk of injury, or there is not likely to be substantial compliance with the voluntary standard. Additionally, some provisions of the Consumer Product Safety Improvement Act of 2008 (CPSIA) included sections regarding certain voluntary standards. Specifically, section 104 of the CPSIA requires the Commission to promulgate mandatory consumer product safety standards for durable infant or toddler products. These mandatory standards are to be "substantially the same as" applicable voluntary standards or more stringent than these voluntary standards, if the Commission determines that more stringent requirements will further reduce the risk of injury associated with the product.

The Voluntary Standards Tracking Activity Report (VSTAR) is issued biannually as: (1) a Mid-Year Report, covering the period from October 1 through March 31, and (2) an Annual Report of the CPSC fiscal year, which covers the period from October 1 to September 30. This document is the Fiscal Year 2020 (FY 2020) Annual Report.

Voluntary standards activities are handled by various standards developing organizations (SDOs), most of them accredited by the American National Standards Institute[1] (ANSI). The majority of the voluntary standards discussed in this report are developed by ASTM International (ASTM) and Underwriters Laboratories Inc. (UL). This report contains a listing of all the SDOs that staff works with on voluntary standards and their abbreviated designation(s).

The VSTAR includes a table listing the voluntary standards that staff contributed to and that were initially published or revised during the reporting period. This report also includes a list of staff approved during the reporting period to vote on a voluntary standard or to hold a leadership position on a standards body.

Lastly, the VSTAR contains a section for each product or product area associated with voluntary standards work, as outlined in the FY 2020 CPSC Operating Plan (Op Plan). The FY 2020 Op Plan outlines 78 different products or product areas for which staff was actively involved in developing voluntary standards during the fiscal year. The voluntary standards covered in this report provide safety provisions addressing potential hazards associated with consumer products found in homes,

[1]International Organization for Standardization (ISO), American Pyrotechnics Association (APA) and The American Fireworks Standards Laboratory (AFSL) are not accredited by ANSI

schools, and recreation areas. More than 30 different CPSC staff serve as designated representatives (DRs) for the voluntary standards work that covers the 78 products outlined in this report.

Each VSTAR product section includes the following information:

Staff Contact:	The name of CPSC staff leading the activity (*i.e.*, the DR);
Voluntary Standard(s):	The designation(s) and name(s) and of existing voluntary standards, potential new voluntary standards, and ISO standards associated with the product, with which staff is actively involved. The designation and titles for new or updated voluntary standards are in ***bold font***. Titles for current (not updated) voluntary standards are in *italics*, and titles of draft or potential standards are in plain font (not bold and non-italicized).
Mandatory Standard(s):	Any associated CPSC mandatory standard(s), proposed regulation(s), and any relevant petitions, regardless of status.
Standard(s) Update:	Any updates to the voluntary standards or potential new voluntary standards where staff participated. This subsection also includes updates to any of the petitions, mandatory standards, or proposed regulations noted in the subsection above.
Purpose:	The purpose of staff's involvement in the voluntary standards.
Activities:	Activity associated with the voluntary standards, mandatory standards, proposed regulations and petitions that occurred during the reporting period. Staff and Commission activity is highlighted in this subsection.
Next Action:	Staff's anticipated future actions on the voluntary standards and associated mandatory standards. This subsection also includes any recommendations associated with the voluntary standard.

For additional information on specific activities outlined in the product sections of this report, and to review any voluntary standards meeting logs, check the CPSC website.

UPDATED STANDARDS

Table 1 lists the 27 revised or new voluntary standards that CPSC staff actively engaged in revising or developing, and that were published during the period October 1, 2019 to September 30, 2020. Details regarding the revisions can be found in the applicable product sections of this report. The designation and titles of these 27 revised or new voluntary standards are shown in bold font in the applicable product sections.

Table 1: New or Revised Voluntary Standard Published October 1, 2019 - September 30, 2020

Product	SDO	Standard Designation
Amusement Rides - Design	ASTM	F2291-20
Amusement Rides - Ownership, Operation, Maintenance, and Inspections	ASTM	F770-19
Amusement Rides - Practice for Measuring the Dynamic Characteristics	ASTM	F2137-19
Amusement Rides - Standard Practice for Auditing	ASTM	F2974-20
Batteries (Lithium)	UL	1642 6th Edition
Batteries (Portable Lithium)	NEMA	ANSI C18.3M Part 2-2019
Batteries (Products with Lithium Button or Coin Cell)	UL	4200A 1st Edition
Bedside Sleepers	ASTM	F2906-19
Candles (Glass Containers)	ASTM	F2179-20
Children's Folding Chairs and Stools	ASTM	F2613-19
Child-Resistant Packages Classifications	ASTM	D3475-20
Child-Resistant Packaging - Standard Terminology	ASTM	F17-20
Commercial Cribs	ASTM	F2710-19
Crib Bumpers (Infant Bedding)	ASTM	F1917-20
Flame Mitigation Devices (Disposable Fuel Containers)	ASTM	F3429-20
Flame Mitigation Devices (One Time Use Portable Emergency Fuel Containers)	ASTM	F2874-20
Flammable Refrigerants	UL	UL/CSA 60335-2-40 3rd Ed
Gasoline, Kerosene, and Diesel Containers (Portable for Consumer Use)	ASTM	F852-20
Hand-Held Carriers	ASTM	F2050-19
Infant Swings*	ASTM	F2088-20
Playground Equipment (Home)	ASTM	F1148-20
Playground Surfacing (Impact Test Method)	ASTM	F3351-19
Playground Surfacing (Standards Guide)	ASTM	F2223-19a
Portable Bed Rails	ASTM	F2085-19
Sling Carriers	ASTM	F2907-19
Smoke Alarms	UL	217 9th Ed (1/6/2020)
Tent Flammability	ASTM	F3431-20

*This voluntary standard was revised twice during the reporting period

VOTING AND LEADERSHIP ROLES ON VOLUNTARY STANDARDS

In accordance with 16 CFR part 1031, "*Commission Participation and Commission Employee Involvement in Voluntary Standards Activities,*" the VSTAR report includes information about staff voting and leadership activities. In FY 2020, the Office of the Executive Director (OEX) approved three new staff leadership roles and four new staff voting requests. OEX also approved two renewal

requests for leadership roles and two renewal requests for voting during the reporting period. Below is a list of the requests approved by OEX in FY 2020:

- Scott Ayers – New approval (leadership on ANSI CSA Z21, Gas Ranges)
- Arthur Lee - New approval (leadership on UL 1042, Electric Room Heaters)
- Rick McCallion - New approval (leadership on ASTM F08.53 Helmet Sensors)
- Steve Harsanyi – New approval (voting on ASTM F15.77, Adult Magnets)
- Allyson Tenney – New approval (voting on ASTM F08.22, Tent Flammability)
- Celestine Kish – New approval (voting on ASTM F15.18, Bassinets/Cradles)
- Kevin Lee - New approval (voting on ASTM F15.29, Public Playgrounds)
- Scott Ayers - Renewal (leadership and voting on ASTM F15.72, Flame Mitigation Devices on Disposable Fuel Containers)
- Hope Nesteruk - Renewal (leadership on ASTM F15.18, Non-full-size Cribs/Play Yards)
- Janet Buyer – Renewal (voting on UL and PGMA standards for Portable Generators)

ORGANIZATIONAL ABBREVIATIONS

The list below contains abbreviations for SDOs and other groups related to the standards covered by this VSTAR report:

AATCC	American Association of Textile Chemist and Colorists
AFSL	The American Fireworks Standards Laboratory
AHFA	American Home Furnishing Alliance
AHRI	Air Conditioning, Heating and Refrigeration Institute
ANSI	The American National Standards Institute • ANS – American National Standard (Approved by ANSI)
APA	American Pyrotechnics Association
APSP	The Association of Pool and Spa Professionals (now part of The Pool & Hot Tub Alliance, see PHTA)
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
ASTM	ASTM International
BIFMA	Business and Institutional Furniture Manufacturing Associations
CAN	Health Canada Regulation

CANENA	Council for Harmonization of Electrotechnical Standards of the Nations in the Americas
CSA	CSA Group • TSC – Technical Subcommittee • TC – Technical Committee
EN	European Nation
ICC	International Code Council
IEC	International Electrotechnical Commission
IEEE	The Institute of Electrical and Electronics Engineers
ISO	International Organization for Standardization • TAG – Technical Advisory Group • TC – Technical Committee
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association • NEC – National Electrical Code • TIA – Technical Interim Agreement
NFSI	National Floor Safety Institute
NIST	National Institute of Standards and Technology
NOCSAE	National Operating Committee on Standards for Athletic Equipment
OPEI	Outdoor Power Equipment Institute
PGMA	Portable Generator Manufacturers Association
PHTA	Pool & Hot Tub Alliance
ROHVA	Recreational Off-Highway Vehicle Association
SAE	Society of Automotive Engineers
SVIA	Specialty Vehicle Institute of America
UL	Underwriters Laboratories Inc. • STP – Standards Technical Panel
WCMA	Window Covering Manufacturers Association

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CPSC Staff Voluntary Standards Activities FY 2020 Annual Report
(October 1, 2019−September 30, 2020)

Additive Manufacturing/3D Printing

Staff Contact	Thomas, Treye	
Voluntary Standard(s)	UL 2904, 1st Edition	*Standard Method for Testing and Assessing Particle and Chemical Emissions from 3D Printers*
	ISO/ASTM WD 52932	Potential new joint ISO and ASTM voluntary standard for determining the particle and chemical emission rates from desktop 3D printer material extrusion
	ASTM WK69730	Potential new voluntary standard for wired directed-energy deposition processes
Mandatory Standard(s)	NA	
Standard(s) Update	The voluntary standards listed above were not updated during the reporting period.	
Purpose	To work with UL, ASTM, CSA, and other SDOs on the development of standards for Additive Manufacturing and 3D Printers to address the hazards associated with 3D printed products and the 3D printing process.	
Activities	ASTM, in general, is balloting many guides and standards related to additive manufacturing and 3D printing, with only a limited number pertaining to consumer products. In November 2019, ASTM issued a main committee ballot with an item for wired directed-energy deposition processes; and in December 2019, ASTM issued a subcommittee ballot with an item for determining particle and emission rates from desktop 3D printers. Staff reviewed these ballot items and had no comments. At the end of the reporting period, each ballot item has unresolved negative votes. In February 2020, staff submitted letters to UL, ASTM, and CSA, requesting the development of new voluntary standards for additive manufacturing and 3D printing with a focus on consumer safety. In response to the letters, staff met with ASTM in February 2020, and with UL in July 2020. As of the end of the reporting period, CSA has not responded to staff's letter; staff will follow up with CSA on their interest in developing voluntary standards for additive manufacturing and 3D printing.	

During the February 2020 meeting, ASTM and staff discussed wearable technologies and additive manufacturing/3D printing. ASTM informed staff that it is trying to speed up the development of voluntary standards through research. ASTM is using their Centers of Excellence model to bring together industry, government, and academia to optimize the standards development processes for Additive Manufacturing.

During the July 2020 meeting, UL and staff discussed wearable technologies and additive manufacturing/3D printing. UL and staff confirmed a commitment to continue a strong relationship in pursuing voluntary standards in each topic.

In May 2020, staff prepared a report to the Commission, *Safety Concerns Associated with 3D Printing and 3D Printed Consumer Products*. This report was shared with UL and ASTM.

In September 2020, staff participated in an ASTM F42 subcommittee meeting, discussing additive manufacturing, 3D printing, and various other activities related to 3D printing hazards.

Next Action Staff will continue to work with stakeholders to develop voluntary standards for additive manufacturing and 3D printing.

Adult Portable Bed Rails

Staff Contact Dayal, Vineed

Voluntary Standard(s) ASTM F3186-17 *Standard Specification for Adult Portable Bed Rails and Related Products*

Mandatory Standard(s) 13-1 *Petition on Adult Portable Bedrails* docketed in June 2013.

Standard(s) Update This voluntary standard was not updated during the reporting period. In July 2020, staff submitted an informational briefing package to the Commission, addressing issues raised by the petition.

Purpose To work with ASTM to revise the voluntary standard, as needed, to address hazards associated with adult portable bed rails.

Activities During the reporting period, staff completed testing of various adult portable bed rails for compliance to the voluntary standard.

In February 2020, ASTM appointed a new subcommittee chair to replace the previous chair who passed away in fall 2019. Because of the gap in time between subcommittee chairs, a delay occurred in scheduling a subcommittee meeting to discuss staff's letter from September 2019, which raised concerns

about discrepancies found in the voluntary standard.

Staff attended the ASTM F15.70 subcommittee meeting in June 2020, and presented compliance testing results on various adult portable bed rails tested by staff. In addition to the presentation summarizing the testing, the subcommittee reviewed staff's September 2019 letter. The subcommittee asked staff to provide the most recent incident data.

In June 2020, Office of Compliance staff sent a letter to ASTM and to all known firms in the industry. The letter urged them to make certain that all adult portable bed rail products manufactured, imported, distributed, or sold in the United States comply with ASTM F3186-17, and to discontinue any products that do not meet the voluntary standard's requirements.

In July 2020, CPSC staff submitted an informational briefing package titled, "*Update on Petition CP 13-1, Petition Requesting a Ban or Standard on Adult Portable Bed Rails.*" The briefing package provided a comprehensive overview of product-related incident data, hazard patterns, economic impacts, compliance testing, and staff's findings on the adequacy of the voluntary standard.

Next Action Staff will provide ASTM with the requested incident data and participate in a task group to analyze the data. Staff will also begin to prepare a decisional briefing package for Commission consideration regarding the petition.

All-Terrain Vehicles (ATVs)

Staff Contact Paul, Caroleene

Voluntary Standard(s) ANSI/SVIA 1-2017 *Four Wheel All-Terrain Vehicles*

Mandatory Standard(s) 16 CFR part 1420, *Standard for All-Terrain Vehicles*

Standard(s) Update The voluntary and mandatory standards listed above were not updated during the reporting period.

Purpose To work with SVIA to revise the voluntary standard to strengthen its safety provisions and to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels to reduce the hazards associated with ATVs.

Activities On October 1, 2019, staff sent a letter to SVIA (as well as to other Off-Highway Vehicle SDOs, OPEI, and ROHVA – see section on Recreational Off-Highway Vehicles below) and included a spreadsheet outlining staff's preliminary analysis of the 84 redacted in-depth investigation reports (IDIs) that CPSC staff

supplied to the SDOs in FY 2019. In December 2019, although the voluntary standards in question have not formally been opened for revision, staff participated in a meeting with members of SVIA (along with OPEI, and ROHVA) to discuss staff's preliminary analysis of the IDIs. These IDIs pertain to fire or debris penetration hazards in off-highway vehicles. The fire issues include ATVs; thus, SVIA participated. The meeting resulted in general agreement to focus on the two fire-related categories with the most IDIs and recalls: fuel systems and engine/exhaust heat.

On March 25, 2020, staff sent a follow-up letter to the three SDOs that summarized the December meeting results, and staff asked for another meeting to discuss potential requirements for fuel systems and engine/exhaust heat management.

Staff also continued research and development work on ATV stability/handling and occupant protection. In November 2019, staff informed SVIA of the publication of a report titled, "ATV Rollover Tests and Verification of a Physical Rollover Simulator," available on the CPSC website. Staff provided some of the information in the report to SVIA at a meeting in June 2019, where data from published reports on ATV stability and handling were also discussed.

In August 2020, staff informed SVIA of the publication of a report titled, "Rollover Tests of ATVs Outfitted with Occupant Protection Devices (OPDs)," available on the CPSC website.

Staff was asked to participate in an OPEI and SVIA/ROHVA meeting set for September 9, 2020. On July 28, 2020, staff sent a letter to OPEI and SVIA/ROHVA, asking that the meeting have a limited agenda focused on fuel systems of off-highway vehicles (OHVs) and that the three SDOs consider various voluntary standards with fuel system requirements to mitigate fire hazards and to determine their applicability to OHVs.

Staff attended the meeting on September 9, 2020, where these topics were discussed: rollover containment, fuel hose tensile test, fuel system ventilation, and fuel tank structural integrity. OPEI staff stated that before this meeting, some of the SDO members were examining the various fuel system requirements from the voluntary standards and may present proposals in the future.

Next Action

Staff will check on the progress of the proposals relating to fuel systems, and will plan for a future meeting with the SDOs to continue discussing fuel system requirements for ANSI/SVIA-1-2017. In accordance with the FY 2021 Operating Plan, staff will prepare an ANPR on fire and debris penetration in FY 2021. The ANPR will include fire issues for ATVs. Staff will also conduct stability research work on ATVs equipped with antilock brake systems and share the results with SVIA.

Amusement Rides, Trampoline Parks, and Adventure Attractions

Staff Contact	Taxier, Daniel	
Voluntary Standard(s)	**ASTM F770-19**	***Standard Practice for Ownership, Operation, Maintenance, and Inspection of Amusement Rides and Devices***
	ASTM F1193-18a	*Standard Practice for Quality, Manufacture, and Construction of Amusement Rides and Devices*
	ASTM F2137-19	***Practice for Measuring the Dynamic Characteristics of Amusement Rides***
	ASTM F2974-20	***Standard Practice for Auditing Amusement Rides and Devices***
	ASTM F2291-20	***Standard Practice for Design of Amusement Rides and Devices***
Mandatory Standard(s)	N/A	

Standard(s) Update

In February 2020, ASTM published ASTM F2974-20, the latest revision to the *Standard Practice for Auditing Amusement Rides and Devices,* which includes revisions to the scope, references, and requirements for auditors. Additionally, ASTM added a non-mandatory appendix, defining classes of inspectors and auditors.

In November 2019, ASTM published ASTM F2137-19, the latest revision to the *Practice for Measuring the Dynamic Characteristics of Amusement Rides*, which includes revisions to the references.

In October 2019, ASTM published ASTM F770-19, the latest revision to the *Standard Practice for Ownership, Operation, Maintenance, and Inspection of Amusement Rides and Devices,* which includes revisions to the maintenance program requirements and a new requirement for the performance of welding.

In June 2020, ASTM published ASTM F2291-20, the latest revision to the *Standard Practice for Design of Amusement Rides and Devices*, which includes a new appendix for considering the biodynamic effect of impact events.

Purpose

To work with ASTM on revising their voluntary standards to strengthen safety provisions addressing hazards associated with amusement rides.

Activities Staff participated in the ASTM F24 subcommittee meetings on October 17-19, 2019, in San Diego, CA. The Evolution (EVO) I task group reviewed current plans to address corrosion hazards relating to design/engineering. The ongoing work in ASTM F2291 includes the prevention of water pooling, corrosion detection, and prevention of internal structural failures. The EVO II task group, working on corrosion issues relating to manufacturing/operations/maintenance, discussed ongoing work in ASTM F770 to add requirements for document retention.

On December 27, 2019, ASTM F24 issued a ballot containing items for F2291, and one for F770. The ballot item for F770 included new language on document retention, and staff wrote a letter regarding this ballot item on January 27, 2020, suggesting that the new language clarify that the document-retention policy is to be considered a minimum. All the ballot items received negative votes and comments.

Staff participated in the ASTM F24 subcommittee meetings on February 12-15, 2020, held in New Orleans, LA. Ballot results and other matters were discussed at these meetings.

In April and August 2020, ASTM issued two F24 ballots containing various items for numerous F42 voluntary standards, including revisions to four different sections in F1193-18a and 17 separate revisions to F2291-20. Staff reviewed the ballot items and had no comments. Most all of the ballot items received negative votes or comments.

On September 25, 2020, ASTM issued another F24 ballot containing an item that revises an acceleration graph in F2291-20. Staff reviewed the ballot item and had no comments. The ballot results for this item were not known at the end of the reporting period.

Next Action Staff will continue to participate on F24 subcommittees, including attending the next committee meetings held virtually during October 12-16, 2020.

Baby Changing Products

Staff Contact Nesteruk, Hope

Voluntary Standard(s) ASTM F2388-18 *Standard Consumer Safety Specification for Baby Changing Products for Domestic Use*

Mandatory Standard(s) 16 CFR part 1235, *Safety Standard for Baby Changing Products*

Standard(s) Update	The voluntary and mandatory standards listed above were not updated during the reporting period.
Purpose	To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with baby changing products.
Activities	In November 2019, staff reviewed and analyzed incident data associated with baby changing products. Staff found two new incidents and no new hazard patterns. Staff shared this information with ASTM.
Next Action	Staff will participate in the next ASTM subcommittee meeting when it is scheduled.

Bassinets/Cradles

Staff Contact	Kish, Celestine
Voluntary Standard(s)	ASTM F2194-16e[1] *Standard Consumer Safety Specification for Bassinets and Cradles*
Mandatory Standard(s)	16 CFR part 1218, *Safety Standard for Bassinets and Cradles*
Standard(s) Update	The voluntary and mandatory standards listed above were not updated during the reporting period.
Purpose	To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with bassinets and cradles.
Activities	On October 6, 2019, ASTM issued a ballot closing report, reviewing the results of four ballot items from a September 2019 ballot related to the bassinet voluntary standard. Two of the items were follow-up ballots to resolve negative votes cast on an earlier "mattress" definition ballot item. These two items passed (the subcommittee's non-persuasive findings of the negatives were upheld). The other two ballot items pertained to folding requirements and baby box terminology. These two items had negative votes, which were later determined to be persuasive. Staff participated in the ASTM subcommittee meeting on October 23, 2019, where the results of the September 2019 ballot were discussed. Task group chairs also provided reports on baby boxes, stability, and ad hoc language. On December 12, 2019, staff sent a letter to the bassinet subcommittee chairman, Scott Lewis, and the ASTM F15 main committee chairman, Rick

Rosati. The letter expressed concerns about the safety of various infant sleep products and staff's belief that in-bed sleepers and compact bassinets should not be included in the bassinet/cradle voluntary standard, in keeping with the Commission's Supplemental Notice of Proposed Rulemaking (SNPR) on Infant Sleep Products. Mr. Rosati replied on December 13, 2019, via email, and suggested a teleconference including staff, himself, and Mr. Lewis. That teleconference occurred on December 23, 2019, and included other subcommittee members. During the meeting, staff reiterated the position stated in the December 12, 2019 letter, and subcommittee members raised questions on how to proceed with these products.

In December 2019, ASTM issued a ballot containing three items concerning the bassinet and cradle voluntary standard: (1) baby box water repellency requirements, (2) baby box lid requirements, and (3) upholding a non-persuasive negative vote from a previous ballot regarding including baby boxes in the scope of the voluntary standard. The first two ballot items contained numerous negative votes, which remained unresolved at the end of the reporting period. Staff filed an abstention vote with comment on the second item, and included a copy of the December 12, 2019 letter. The third ballot item passed.

On February 25, 2020 staff participated in an ASTM task group teleconference on compact bassinets. Staff reiterated their assessment that these products should not be included in the bassinet and cradle voluntary standard. After much discussion, the task group decided to move forward with a ballot item to include these products.

On March 2, 2020, staff participated in an ASTM task group teleconference regarding baby boxes. The task group reviewed the results of the December 2019 ballot.

On March 5, 2020, ASTM issued a ballot with two items pertaining to the bassinet and cradle voluntary standard. The first item dealt with expanding the scope of the voluntary standard to include compact bassinets, and the second item was a revision of the warnings language to match the current ad hoc recommendations. Both ballot items received negative votes that are still unresolved at the end of the reporting period. Staff voted negative on the scope ballot item, and cited the December 2019 letter that compact bassinets should not be included in the bassinet/cradle voluntary standard, and that any infant sleep product should meet one of the existing four sleep product voluntary standards (bassinets/cradles, cribs, play yards, and bedside sleepers).

On July 7, 2020 the bassinet subcommittee chair and the hand-held carrier chair met with staff to discuss a statement made by members of the Commission, during the voting process for the hand-held carrier direct final rule. The statement, made by Commissioner Kaye and Acting Chairman Adler, raised concerns about insufficient provisions for safe sleep, for products covered under the hand-held carrier voluntary standard that are intended for sleep.

The stability task group met on July 23, 2020, to review the negative votes cast on the March 5, 2020 bassinet ballot items, including staff's negative vote. The task group members stated that the development of the voluntary standard to include compact bassinets within the scope of the standard will continue, regardless of staff's letter.

On September 2, 2020, staff participated in a task group meeting for multiple occupancy bassinets. During the meeting, CPSC staff raised a question regarding the intent of the task group: whether the intent is to address the sections in the voluntary standard that concern occupancy or to evaluate fully the appropriateness of multiple-occupancy bassinets within the confines of known safe sleep criteria. The task group agreed that they should be evaluating multiple-occupancy bassinets for all hazards.

On September 17, 2020 ASTM issued a ballot containing three items pertaining to bassinets: stability, scope/terminology, and side height. The ballot was still open at the end of the reporting period.

Next Action Staff will review and cast a vote on the ASTM ballot items and participate in upcoming meetings, including the next ASTM subcommittee meeting scheduled for November 10, 2020.

Bath Tubs (Adult)

Staff Contact Mella, Lawrence

Voluntary Standard(s)	ASTM F462 - 79(2007) (Withdrawn in 2016)	*Consumer Safety Specification for Slip-Resistant Bathing Facilities*

Mandatory Standard(s) N/A

Standard(s) Update The voluntary standard listed above was not updated during the reporting period.

Purpose To work with ASTM to re-establish F462, or develop a new voluntary standard to address fall hazards associated with adult bath tubs and shower facilities.

Activities On November 20, 2019, staff participated in an ASTM F15.03 subcommittee meeting on safety standards for bathtub and shower structures. During the meeting, the members reviewed the history of F462, and discussed the challenges with reissuing the voluntary standard. The scope of the voluntary standard (whether it should be specific to the surface type), durability, and research methodology were other subjects discussed. The subcommittee chair proposed several new task groups to undertake much of the expected work and

staff will participate.

ASTM held another subcommittee meeting on January 16, 2020. Due to a scheduling conflict, staff did not attend. During this meeting, the subcommittee reviewed the scope of the eight new task groups.

In July 2020, staff developed a Statement of Work for a contract regarding bath tub test method development, but there were no bidders for the contract. At the next ASTM subcommittee meeting, staff intends to discuss potential future work and a potential new Statement of Work.

Next Action Staff will participate in the next ASTM subcommittee meeting, when scheduled, and provide support to the task groups.

Batteries, Fire (High-Energy Density)

Staff Contact Kadiwala, Jay

Voluntary Standard(s)

UL 1642, 6th Edition	***Standard for Safety for Lithium Batteries***
UL 2054, 2nd Edition	*Standard for Household and Commercial Batteries*
UL 2743, 2nd Edition	*Standard for Portable Power Packs*
UL 1310, 7th Edition	*Standard for Safety for Class 2 Power Units*
UL 62133, 2nd Edition	*Standard for Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications*
ANSI C18.2M Part 2-2014	*American National Standard for Portable Rechargeable Cells and Batteries—Safety Standard*
ANSI C18.3M Part 2-2019	***American National Standard for Portable Lithium Primary Cells and Batteries - Safety Standard***
ANSI C18.4M-2017	*American National Standard for Portable Cells and Batteries*

Mandatory Standard(s) N/A

Standard(s) Update In December 2019, NEMA published ANSI C18.3M Part 2-2019, the latest revision to the *American National Standard for Portable Lithium Primary Cells*

and Batteries - Safety Standard, to harmonize with IEC 60086-4, and to add a "Keep out of reach" icon and warnings text to address battery ingestion hazards.

In September 2020, UL published UL 1642, 6th Edition, the latest edition to the *Standard for Safety for Lithium Batteries*, to clarify the projectile test setup and to remove the outdated National Poison Control Center phone number for lithium coin cell packaging.

Purpose To work with the various SDOs on revising battery, battery charger, and battery-powered product safety voluntary standards and support developing certification programs for batteries to address fire-related hazards, including overheating, thermal burns, fire, and explosions.

Activities During the reporting period, staff participated in three NEMA ANSI C18 subcommittee meetings; an October 2019, 2-day meeting in Rosslyn, VA, a teleconference in February 2020, and another teleconference in September 2020. NEMA is the SDO responsible for the ANSI C18 standards and subcommittee. Staff has been working with the subcommittee and task group to draft a recommended design guide for use of lithium-ion batteries for inclusion in an annex of ANSI C18.2, Part 2. During the February 2020 meeting, the subcommittee discussed changing the proposed draft of ANSI C18.5M, Part 2, from a standard, to an application guide or something similar, based on ANSI requirements and other existing standards. In September 2020, the subcommittee continued to move towards changing ANSI C18.5M, Part 2, from a product standard, to an application guide which would not contain any requirements.

Next Action Staff will continue to participate in NEMA, UL, IEEE, and other pertinent meetings, to draft, revise, and harmonize requirements to eliminate or reduce overheating and fire hazards in high-energy density batteries.

Batteries, Ingestion (Button)

Staff Contact Le, Huy

Voluntary Standard(s)

UL 1642, 5th Edition	***Standard for Safety for Lithium Batteries***
UL 4200A, 1st Edition	***Standard for Safety For Products Incorporating Button or Coin Cell Batteries of Lithium Technologies***
UL 60065, 8th Edition	*Standard for Audio, Video, and Similar Electronic Apparatus–Safety Requirements*
ANSI C18.1M Part 2-2017	*American National Standard for Portable Primary Cells and Batteries with Aqueous Electrolyte - Safety Standard*

ANSI C18.2M Part 2-2014	*American National Standard for Portable Rechargeable Cells and Batteries—Safety Standard*
ANSI C18.3M Part 2-2019	***American National Standard for Portable Lithium Primary Cells and Batteries - Safety Standard***
ANSI C18.4M-2017	*American National Standard for Portable Cells and Batteries*

Mandatory Standard(s) N/A

Standard(s) Update In December 2019, NEMA published ANSI C18.3M Part 2-2019, the latest revision to the *American National Standard for Portable Lithium Primary Cells and Batteries - Safety Standard,* to harmonize with IEC 60086-4, and to add a "Keep out of reach" icon and warnings text to address battery ingestion hazards.

In September 2020, UL published UL 1642, 6th Edition, the latest edition to the *Standard for Safety for Lithium Batteries,* to clarify the projectile test setup and to remove the outdated National Poison Control Center phone number for lithium coin cell packaging.

In May 2020, UL published UL 4200A, 1st Edition, the latest edition to the *Standard for Safety For Products Incorporating Button or Coin Cell Batteries of Lithium Technologies,* to add screw torque requirements for battery compartment accessibility.

Purpose To work with the various SDOs to revise button and coin cell battery safety voluntary standards and end product voluntary standards for products that use these button and coin cell batteries, to address accidental battery ingestions that can cause severe injury and death.

Activities During the reporting period, staff participated in three NEMA ANSI C18 subcommittee meetings; an October 2019, 2-day meeting in Rosslyn, VA, a teleconference in February 2020, and another teleconference in September 2020. NEMA is the SDO responsible for the ANSI C18 standards and subcommittee. In October 2019, the subcommittee discussed warning labels and pictograms for non-lithium chemistry button/coin cells. Staff continued to support keeping "death and serious injury" and the "/!\WARNING" safety alert symbol and signal word in the warning label as a minimum. In February 2020, the subcommittee again discussed warning labels. Staff continued to support keeping "death" as part of the warning label. Additionally, Energizer, a battery manufacturer, provided a study of ingestion of zinc-air batteries that show those to be less hazardous. Also during the February 2020 meeting, the subcommittee discussed changing the proposed draft of ANSI C18.5M, Part 2, from a product standard, to an application guide which would not contain any requirements, based on ANSI requirements and other existing standards. In September 2020, staff continued to support the "WARNING" signal word over using

"CAUTION" as the signal word which is presently in the IEC 60086-5 proposed draft. "WARNING" is recommended in ANSI Z535.4 *American National Standard for Product Safety Signs and Labels* when serious injury or death is the possible outcome of not following the warning. The subcommittee continued to move towards changing ANSI C18.5M, Part 2, from a standard, to an application guide.

In June 2020, staff also reviewed a new UL 4200A proposal to update the minimum screw torque requirements for battery compartment accessibility.

Next Action Staff will continue to participate in NEMA, UL, and other related meetings to draft, revise, and harmonize requirements to eliminate or reduce battery ingestion hazards.

Bedside Sleepers

Staff Contact Nesteruk, Hope

Voluntary Standard(s) **ASTM F2906-13(2019)** ***Standard Consumer Safety Specification for Bedside Sleepers***

Mandatory Standard(s) 16 CFR part 1222, *Safety Standard for Bedside Sleepers*

Standard(s) Update In October 2019, ASTM reaffirmed and published without changes, ASTM F2906-13(2019), *Standard Consumer Safety Specification for Bedside Sleepers*.

Purpose To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with bedside sleepers.

Activities On October 21, 2019, CPSC staff participated in a subcommittee meeting on bedside sleepers. During the meeting, the subcommittee reviewed ballot comments, affirming a re-approval of ASTM F2906-13. In addition, the ad hoc language task group provided a report and intends to review the proposed revision with the task group at the next meeting. Staff is a member of the ad hoc language task group.

The ad hoc language task group met via teleconference on November 21, 2019. The task group reviewed the proposed revisions to the voluntary standard to reflect the latest recommendations from the F15 ad hoc task group. Staff reviewed and discussed the proposed language during the task group meeting.

On March 5, 2020, ASTM issued a F15 ballot containing an item for the ad hoc language revision for bedside sleepers. The ballot item received three negative votes - one was found to be persuasive. The item was removed from ballot.

Staff reviewed the bedside sleeper standard in preparation for the Infant Sleep Products SNPR, and included conformance with this standard as one of the types of safe sleep standards for infant sleep products.

Next Action Staff will participate in the next ASTM subcommittee meeting, when scheduled.

Bicycles

Staff Contact Paul, Caroleene

Voluntary Standard(s) ASTM F2793-14 *Standard Specification for Bicycle Grips*

Mandatory Standard(s) 16 CFR part 1512, *Requirement for Bicycles*

Standard(s) Update The voluntary and mandatory standards listed above were not updated during the reporting period.

Purpose To develop new or revised ASTM voluntary standards to reduce or eliminate hazards associated with bicycles and bicycle components.

Activities Staff participated in the ISO U.S. TAG meeting on November 5, 2019, where key discussions included tire/rim issues. Staff also participated in the ASTM F08.10 subcommittee meeting on bicycles on November 6, 2019. During the ASTM meeting, a work item was established to begin developing a new test procedure to test bicycle grips in ASTM F2793. This work item was established in response to CPSC staff sharing a report with the subcommittee regarding a fatality involving impalement on the end of an exposed handlebar on a child's bicycle.

In April 2020, staff published a report titled, "Safety Concerns Associated with Micromobility Products," which included incident data and hazards associated with electric bicycles. In September 2020, staff hosted a micromobility forum that included a discussion of hazards associated with electric bicycles.

Next Action Staff will attend the next ASTM F08.10 and ASTM F08.96 meetings, when scheduled.

Booster Seats

Staff Contact Kish, Celestine

Voluntary Standard(s)	ASTM F2640-18	*Standard Consumer Safety Specification for Booster Seats*
Mandatory Standard(s)	16 CFR part 1237, *Safety Standard for Booster Seats*	
Standard(s) Update	16 CFR part 1237, *Safety Standard for Booster Seats,* became effective January 2, 2020.	
Purpose	To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with booster seats.	
Activities	To monitor the adequacy of the mandatory standard and its referenced voluntary standard, staff conducted the annual review of incident data associated with booster seats in November 2019, and reported the results of the review to ASTM. Staff did not identify any new hazard patterns since the last review.	
Next Action	Staff will review and analyze incident data annually and will participate in the next ASTM subcommittee meeting when it is scheduled.	

Candles and Candle Accessories

Staff Contact	Ayers, Scott	
Voluntary Standard(s)	ASTM F2326-04(2015)	*Standard Test Method for Collection and Analysis of Visible Emissions from Candles as They Burn*
	ASTM F2058-07(2015)	*Standard Specification for Candle Fire Safety Labeling*
	ASTM F2417-17	*Standard Specification for Fire Safety for Candles*
	ASTM F2601-18	*Standard Specification for Fire Safety for Candle Accessories*
	ASTM F2179-20	***Standard Specification for Annealed Soda-Lime-Silicate Glass Containers That Are Produced for Use as Candle Containers***
	ASTM F1972-19	*Standard Guide for Terminology Related to Candles and Associated Accessory Items*

Mandatory Standard(s) Petition CP 04-1 and HP 04-01, Denied September 2014. Commission directed staff to continue to work with ASTM.

Standard(s) Update In March 2020, ASTM published ASTM F2179-20, the latest revision to the *Standard Specification for Annealed Soda-Lime-Silicate Glass Containers That Are Produced for Use as Candle Containers*, to clarify that compliance to the voluntary standard is needed when glass containers are produced and not filled with wax.

Purpose To work with ASTM on revising the voluntary standard to strengthen its safety provisions addressing hazards associated with candles and candle accessories.

Activities On January 16, 2020, ASTM issued a ballot item for ASTM F2179 on candle glass containers. The ballot passed, and the voluntary standard was approved as ASTM F2179-20.

Staff participated in four ASTM subcommittee quarterly teleconferences to review recent incidents and recalls during the reporting period. During the meetings held in October 2019, January 2020, April 2020, and July 2020, the subcommittee reviewed a total of 20 incident reports found on SaferProducts.gov, and one European recall. The ASTM standards address all identified in-scope issues associated with the incidents.

Staff participated in three task group teleconferences on candle labeling in June 2020, July 2020, and September 2020. The task group is considering whether to reaffirm ASTM F2058 or revise requirements. The task group is also considering the necessary work to allow European pictograms in place of text; however, the task group believes that this would require too much work at this time.

Staff also participated in a joint subcommittee and task group teleconference in September 2020. During the subcommittee portion, participants were updated on the progress of the task group work over the past year. The task group portions included working meetings on glass used for filled candles, labeling, candle visible emissions and indoor air quality, and candle fire safety. The participants hoped to have in-person subcommittee meetings in April 2021, and task group meetings in September 2021.

Next Action Staff will participate in future subcommittee and task group meetings, as scheduled.

Carbon Monoxide (CO) Alarms

Staff Contact Brookman, Matthew

Voluntary Standard(s)	UL 2034, 4th Edition	*Single and Multiple Station Carbon Monoxide Alarms*
	NFPA 72, 2019 Edition	*National Fire Alarm and Signaling Code*
Mandatory Standard(s)	N/A	
Standard(s) Update	The voluntary standards listed above were not updated during the reporting period.	
Purpose	To work with UL, NFPA, and other stakeholders on potential revisions to voluntary standards and codes to strengthen safety provisions addressing hazards mitigated by carbon monoxide alarms.	
Activities	During the reporting period, staff worked with the Smoke and CO Alarm Survey project contractor to develop an alternative approach to overcome the lack of responsiveness. OMB approved the new approach in November 2019, and a pilot program launched in December 2019. The pilot program produced a much higher response rate, about 3.5 percent, compared to 0.02 percent. Staff reviewed the contractor's summary report of the pilot program. The next phase of the survey was postponed until COVID-19 concerns could be addressed. In October 2019, staff participated in a CSA TSC meeting on gas furnaces during CSA Committee Week in Cleveland, OH. During the meeting, the TSC formed a working group to look at requirements for CO alarms installed before gas furnaces can be installed. In November 2019, staff participated in the Carbon Monoxide Summit in Lebanon, NH, where staff presented on CO statistics, and UL staff led a discussion on the current edition of UL 2034. In June 2020, staff participated in a first draft meeting of the next edition of NFPA 72. During this meeting the committee reviewed public input to requirements pertaining to household smoke and carbon monoxide alarms.	
Next Action	CPSC staff will continue working with the contractor in completing the Smoke and CO alarms survey. Staff will continue working with UL, NFPA, and other stakeholders on CO alarms and safety.	

Carriages and Strollers

Staff Contact	Talcott, Kristen	
Voluntary Standard(s)	ASTM F833-19	*Standard Consumer Safety Specification for Carriages and Strollers*

Mandatory Standard(s)	16 CFR part 1227, *Safety Standard for Carriages and Strollers*
Standard(s) Update	The voluntary and mandatory standards listed above were not updated during the reporting period.
Purpose	To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with carriages and strollers.
Activities	Staff participated in an ASTM subcommittee meeting on October 22, 2019, where the brake accessibility, jogger wheel detachment, and tricycle/stroller task groups provided reports. Staff also participated a tricycle/stroller task group meeting on October 3, 2019. Discussions included which products should be included in the scope of ASTM F833, and whether these products should be covered under a separate voluntary standard. The task group met again on March 9, 2020, where discussion included: the need for consistency with the new ASTM tricycle voluntary standard, and which product features should be used to determine whether a product is in or out of scope. Staff also participated in a test weight task group on March 25, 2020, where the members continued the discussion of unacceptable conditions after testing, including whether deformation and tearing should be allowed. On March 5, 2020, ASTM issued an F15 ballot containing an item regarding stroller combination products. The ballot item received only an administrative negative, which was unresolved at the end of the reporting period.
Next Action	Staff will participate in the next ASTM subcommittee meeting, when scheduled.

Children's Folding Chairs and Stools

Staff Contact	Lee, Kevin
Voluntary Standard(s)	**ASTM F2613-19** ***Standard Consumer Safety Specification for Children's Chairs and Stools***
Mandatory Standard(s)	16 CFR part 1232, *Safety Standard for Children's Folding Chairs and Stools*
Standard(s) Update	In December 2019, ASTM published ASTM F2613-19, the latest revision to the *Standard Consumer Safety Specification for Children's Chairs and Stools*, to update the section on scissoring, shearing, and pinching, and the associated test method. The Commission issued a direct final rule, effective July 7, 2020, to update 16

CFR part 1232, *Safety Standard for Children's Folding Chairs and Stools* during the reporting period, to incorporate by reference the most recent version of the applicable ASTM standard, ASTM F2613-19.

Purpose To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with children's folding chairs and stools.

Activities On October 21, 2019, staff participated in the ASTM subcommittee meeting, where the attendees discussed the recent ballot item, revising the testing procedure for the scissoring, shearing, and pinching requirement. The ballot item passed, and the revised voluntary standard was approved on November 1, 2019.

In December 2019, ASTM published a revised version of F2613, and pursuant to section 104(b)(4)(B) of the CPSIA, ASTM notified the CPSC of this revision on January 7, 2020.

On March 11, 2020, staff submitted a briefing memorandum recommending that the Commission issue a direct final rule updating the reference cited in the Commission's rule for children's folding chairs and stools, 16 CFR part 1232, to reflect ASTM F2613-19. The Commission voted to approve that ASTM F2613-19 be incorporated by reference into the direct final rule. The updated final rule was published in the *Federal Register* on April 1, 2020, and it went into effect on July 7, 2020.

On September 17, 2020, ASTM issued a ballot containing an item to revise the scope of the voluntary standard to clarify that the scope does not include toddler rockers. The ballot results were not known at the end of the reporting period.

Next Action Staff will participate in the next ASTM subcommittee meeting, scheduled for November 10, 2020.

Child-Resistant Packages (CRP)

Staff Contact Eilbert, Mark

Voluntary Standard(s)

ASTM D3475-20	***Standard Classification of Child-Resistant Packages***
ASTM F17-20	***Standard Terminology Relating to Primary Barrier Packaging***
ASTM F3375-19	*Standard Test Method for Assessing Non-Metered Restricted Delivery Systems for Liquid Consumer Products*

Mandatory Standard(s) 16 CFR part 1700, *Poison Prevention Packaging*

Standard(s) Update In August 2020, ASTM published ASTM D3475-20, the latest revision to the *Standard Classification of Child-Resistant Packages*, which includes an update of the reference table.

In August 2020, ASTM published ASTM F17-20, the latest revision to the *Standard Terminology Relating to Primary Barrier Packaging*, which includes an update to the definition of "seal strength."

Purpose To work with ASTM on package design and development to ensure the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with child-resistant packaging.

Activities Staff participated in the ASTM subcommittee meeting held in October 2019, in Houston, TX. During the meeting, Dr. Lori Dixon, President of Great Lakes Marketing, outlined the results of some children and adult accessibility testing, as specified in the Poison Prevention Packaging Act and the associated regulation, 16 CFR part 1700. The subcommittee also discussed a new work item to revise the reference table in ASTM D3475-18.

In February 2020, ASTM issued an F02 committee ballot, including two ballot items on the voluntary standards where staff are involved. Staff reviewed the ballot items and had no suggested changes. One ballot item, which passed, updated two company names listed in the reference table in ASTM D3475-18. The other ballot item revised the "seal strength" definition found in ASTM F17-18a.

Staff participated in the ASTM F02 subcommittee meetings on April 29, 2020. The subcommittee reviewed the February 2020 ballot items and as a result, the negative votes cast on both ballots were withdrawn and the ballot items were approved and ASTM D3475 and ASTM F17 were revised.

Next Action Staff will participate in the next ASTM subcommittee meeting, scheduled for October 28, 2020.

Clothes Dryers

Staff Contact Lee, Arthur

Voluntary Standard(s) UL 2158, 5th Edition *Standard for Electric Clothes Dryers*

Mandatory Standard(s)	N/A
Standard(s) Update	The voluntary standard listed above was not updated during the reporting period.
Purpose	To work with UL on revising the voluntary standard to strengthen its safety provisions addressing hazards associated with clothes dryer fires.
Activities	During the reporting period, CPSC staff began an evaluation program looking for any gaps in the current fire containment test within the voluntary standard. As of the end of the reporting period, this evaluation is not complete. The COVID-19 pandemic has delayed the testing portion of the evaluation. In September 2020, staff provided an update to UL staff on the evaluation via email.
Next Action	Staff will continue the testing portion of the evaluation. Once completed, staff will provide a summary to the UL 2158 STP on the findings of the evaluation.

Clothing Storage Units

Staff Contact	Talcott, Kristen	
Voluntary Standard(s)	ASTM F2057-19	*Standard Safety Specification for Clothing Storage Units*
	ASTM F3096-14	*Standard Performance Specification for Tipover Restraint(s) Used with Clothing Storage Unit(s)*
Mandatory Standard(s)	The Commission published an advance notice of proposed rulemaking (ANPR) in November 2017 (82 FR 56752, Nov. 30, 2017).	
Standard(s) Update	The voluntary standards and ANPR listed above were not updated during the reporting period.	
Purpose	To work with ASTM on revising the voluntary standard to strengthen its safety provisions addressing hazards associated with furniture tip-over incidents.	
Activities	During the reporting period, staff participated in several ASTM task group meetings that discussed potential revisions to the voluntary standard: • Multiple/loaded drawer task group – October 28, 2019 and March 12, 2020 • Scope task group – October 29, 2019, March 9, 2020, and September 30, 2020 • Labeling task group – October 30, 2019 • Head entrapment task group – October 30, 2019	

- Tip restraint task group – December 2, 2019 and January 24, 2020
- Carpet testing task group – March 16, 2020 and May 21, 2020
- Dynamic load testing task group – March 23, 2020

Staff also participated in subcommittee meetings on November 7, 2019, at ASTM headquarters in West Conshohocken, PA, and on June 10, 2020, held via teleconference. During the meetings, the various task groups provided update reports. CPSC staff provided updates regarding CPSC activities and testing of dresser samples. Staff also outlined the contractor work, and shared the focus group questionnaire link with the subcommittee.

Staff also participated in ISO TC 136 meetings during the reporting period on April 20, May 18, and June 30. During the meetings the work group members discussed testing apparatus materials, shelving units, loading and potential wording changes in the ISO standard.

Next Action Staff participated in the ASTM labeling task group meeting scheduled for October 1, 2020, and will also participate in the subcommittee meeting scheduled for November 12, 2020.

Commercial Cribs

Staff Contact Nesteruk, Hope

Voluntary Standard(s) **ASTM F2710-19** ***Standard Consumer Safety Performance Specification for Commercial Cribs***

Mandatory Standard(s) 16 CFR part 1219, *Safety Standard for Full-Size Cribs,* and CFR part 1220, *Safety Standard for Non-Full-Size Baby Cribs*

Standard(s) Update In December 2019, ASTM published ASTM F2710-19, the latest revision to the *Standard Consumer Safety Performance Specification for Commercial Cribs,* which includes many formatting and editorial changes throughout the standard.

The Commission issued a direct final rule to update 16 CFR part 1220, *Safety Standard for Non-Full-Size Baby Cribs,* during the reporting period, to incorporate by reference the latest revision of the voluntary standard, ASTM F406-19.

Purpose To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with cribs in commercial settings, such as hotels and child care centers.

Activities Staff participated in the ASTM F15.57 subcommittee meeting held on October

23, 2019. During the meeting, the subcommittee reviewed ballot results for a previous ballot item containing multiple revisions throughout the voluntary standard. One negative vote was withdrawn, and the subcommittee instead discussed editorial changes. The ballot item passed, and ASTM revised and approved the voluntary standard on December 1, 2019.

During the October 2019 subcommittee meeting, the subcommittee also reviewed the incident data provided by CPSC staff in FY 2019. Staff raised attention to several complaints about brakes on commercial cribs and suggested a task group. The chair formed a task group to develop language pertaining to brakes. Staff will participate on the task group.

Next Action Staff will participate in the next ASTM subcommittee meeting or task group meeting, when scheduled.

Connected Products/Smart Products/Internet of Things (IoT)

Staff Contact Lee, Simon

Voluntary Standard(s)	UL 5500, 1st Edition	*Remote Software Updates*
	UL 2900-1, 1st Edition	*Software Cybersecurity for Network-Connectable Devices*
	ASTM F3463-20 (Not Published)	Future *Standard Guide for Ensuring the Safety of Connected Consumer Products*

Mandatory Standard(s) N/A

Standard(s) Update The published voluntary standards listed above were not updated during the reporting period. In September 2020, ASTM approved a new standard guide, ASTM F3463-20, but did not publish the standard until after the reporting period.

Purpose To work with UL, ASTM, and other stakeholders on revising existing voluntary standards and develop new voluntary standards to address hazards associated with connected consumer products.

Activities During the reporting period, staff participated in nine meetings of the ASTM F15.75 subcommittee and task groups working on a draft proposed standard guide that became ASTM F3463-20. During these meetings, participants worked together to write the draft standard guide. In May 2020, ASTM issued a ballot containing the draft proposed standard guide. The ballot closed without any negative comments, leading to the future publication of F3463-20 after the reporting period. This future standard guide outlines the safety aspects

manufacturers should consider when designing and developing new connected products for consumer use.

In January 2020, staff hosted a meeting with UL cybersecurity experts, where UL staff outlined their new, five-level IoT Security Rating certification plan. In March 2020, April 2020, and May 2020, staff also participated in UL 2900 teleconferences on scoping connected product issues.

In December 2019, and July 2020, staff met with AHAM to discuss many topics, including an AHAM IoT product evaluation strategy that uses end-product voluntary standards in conjunction with overall cybersecurity standards.

Next Action Staff will work with the ASTM F15.75 subcommittee to monitor the future ASTM F3463-20 and revise, if needed. Staff will continue to work with stakeholders, such as ASTM and UL, to develop or improve voluntary standards for connected products.

Crib Bumpers (Infant Bedding)

Staff Contact Smith, Tim

Voluntary Standard(s) **ASTM F1917-20** ***Standard Consumer Safety Performance Specification for Infant Bedding and Related Accessories***

Mandatory Standard(s) 16 CFR part 1240, *Safety Standard for Crib Bumpers/Liners* (Proposed Rule)

Standard(s) Update The Commission approved publication of a notice of proposed rulemaking (NPR) for crib bumpers/liners on March 18, 2020. The *Federal Register* notice was published on April 3, 2020 (85 FR 18878).

In May 2020, ASTM published ASTM F1917-20, the latest revision to the *Standard Consumer Safety Performance Specification for Infant Bedding and Related Accessories*, which includes several changes, many that align with the NPR.

Purpose To work with ASTM on revising the voluntary standard to: (1) strengthen its safety provisions addressing hazards, and (2) form the basis of a federal standard intended to reduce hazards associated with crib bumpers.

Activities On October 3, 2019, staff sent a letter to ASTM commenting on a September 2019 ballot item regarding ASTM F1917-12. Staff did not submit a vote, but pointed out errors in the ballot item. The letter also noted that many of the balloted revisions align with the recommendations included in staff's draft proposed rule briefing package, and suggested additional changes for consideration in future revisions to the ASTM voluntary standard. In addition to

staff's comment letter, the ASTM ballot item received many negative votes. On October 23, 2019, staff participated in the ASTM F15.19 subcommittee meeting, where the ballot results were discussed, and the negative votes were either withdrawn, or found to be non-persuasive.

On March 18, 2020, the Commission voted (4-0) to approve publication of the crib bumper draft proposed rule, with specified changes. The Commission proposed to incorporate by reference ASTM F1917-12, with modifications. The modifications include, among other things, a definition of "crib bumper" and firmness and air flow requirements. The *Federal Register* notice for the proposed rule was published on April 3, 2020.

In May 2020, ASTM published the latest revision of the voluntary standard, ASTM F1917-20, containing many updates throughout the voluntary standard.

Next Action Staff will participate in the next ASTM subcommittee meeting, when scheduled.

Crib Mattresses (including Supplemental and Aftermarket Mattresses)

Staff Contact Nesteruk, Hope

Voluntary Standard(s) ASTM F2933-19 *Standard Consumer Safety Performance Specification for Crib Mattresses*

Mandatory Standard(s) Petition CP 15-2: *Petition Requesting Ban on Supplemental Mattresses for Play Yards with Non-Rigid Sides,* and Section 104 of the CPSIA (to be developed)

Standard(s) Update The voluntary standard and the petition listed above were not updated during the reporting period.

Purpose To work with ASTM on revising the voluntary standard to: (1) strengthen its safety provisions addressing hazards, and (2) form the basis of a federal standard intended to reduce hazards associated with crib and supplemental mattresses.

Activities Staff participated in the ASTM subcommittee meeting held on October 23, 2019. During the meeting, the task group chairs for the following task groups provided updates: cyclic testing, mattress compression, and non-segmented mattresses.

On December 11, 2019, staff sent a letter to the ASTM subcommittee chairman, recommending that the subcommittee consider four issues related to crib mattresses: firmness, cyclic testing, compression, and various clarifications to the voluntary standard.

On January 16, 2020, ASTM issued an F15 ballot containing a ballot item for crib mattresses providing requirements for aftermarket mattresses sold for use in play yards and non-full-size cribs. The ballot closed in February 2020, with several negative votes that remained unresolved, at the end of the reporting period.

Staff also participated in another subcommittee meeting, held via teleconference on January 29, 2020. During the meeting, staff discussed the December 2019 letter regarding mattress firmness. In addition, staff provided compression testing results of crib mattresses using fitted sheets.

Staff participated in several task group meetings during the year: mattress compression (January 6, 2020 and February 10, 2020); mattress firmness (January 8, 2020 and February 13, 2020); and ad hoc language (November 25, 2019 and February 13, 2020).

On September 30, 2020, staff submitted an NPR briefing package for crib mattresses to the Commission, in accordance with Section 104 of the CPSIA.

Next Action The NPR for crib mattresses was published in the *Federal Register* on October 26, 2020, after the end of the reporting period. Staff will review the submitted comment and begin to prepare a briefing package for a final rule. Staff will also participate in the next ASTM subcommittee meeting, scheduled for November 10, 2020.

Expansion Gates and Expandable Enclosures

Staff Contact Nesteruk, Hope

Voluntary Standard(s) ASTM F1004-19 *Standard Consumer Safety Specification for Expansion Gates and Expandable Enclosures*

Mandatory Standard(s) 16 CFR part 1239, *Safety Standard for Gates and Enclosures*

Standard(s) Update The final rule, *Safety Standard for Gates and Enclosures*, 16 CFR part 1239, was published in the *Federal Register* on July 7, 2020 (85 FR 40100) and will be effective on July 6, 2021. ASTM did not update the voluntary standard during the reporting period.

Purpose To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with expansion gates and expandable enclosures.

Activities The ASTM gates and enclosures subcommittee did not meet during the October 2019 ASTM committee week. After the October committee week, staff asked

the subcommittee chair to schedule a subcommittee meeting. The subcommittee chair responded by scheduling a meeting for January 21, 2020.

In October 2019, staff provided the subcommittee with an update of incident data. Included in the data were incidents associated with a new hazard pattern seen on retractable mesh gates.

On December 11, 2019, staff sent a letter to the ASTM subcommittee chair discussing the outstanding issues outlined in the NPR issued in June 2019. In the letter, staff requested that these outstanding topics, warning label location and visual side-pressure indicators, be discussed during the January 21, 2020 subcommittee meeting.

Staff participated in the subcommittee meeting on January 21, 2020. During the meeting, ASTM formed a task group to develop language for the warning label placement. In addition, ASTM formed a task group to review the incidents associated with retractable mesh gates. Staff will serve on both task groups.

On March 5, 2020, ASTM issued a F15 ballot containing a ballot item on gates and enclosures. The ballot item revised the warnings language and specified the placement of warnings for pressure gates that use wall cups. The ballot item received negative votes that were found to be persuasive.

Staff participated in a visual indicators task group teleconference on March 10, 2020. Staff reviewed with the task group, various options for visual side-pressure indicators, as outlined in staff's letter of December 11, 2019.

On May 6, 2020 ASTM issued another ballot with an item to address the negative votes from the March 2020 ballot. The item revises the warning section in the voluntary standard to include a separate and distinct warning for pressure gates only, positioned in a conspicuous place. The ballot item received three comments and one administrative negative vote, to hold it from moving forward.

On June 2, 2020, the Commission voted to publish in the *Federal Register*, a final rule establishing a consumer product safety mandatory standard for gates and enclosures, pursuant to section 104 of the CPSIA. The final rule was published on July 6, 2020, and incorporates by reference, ASTM F1004-19, with two alternative requirements for pressure-mounted gates, which would make the voluntary standard more stringent, to further reduce the risk of injury associated with children knocking down or pushing through incorrectly installed pressure-mounted gates.

On August 4, 2020, ASTM issued another ballot with an item for the gates voluntary standard, to include performance requirements associated with visual side-pressure indicators. Following the ballot, staff submitted a comment letter supporting the ballot item and offering editorial comments to address minor differences between the ballot item and the Commission's final rule. The ballot item received several negative votes, which remained unresolved at the end of

the reporting period.

Next Action Staff will participate in the next ASTM subcommittee meeting, when scheduled.

Fireworks

Staff Contact Valliere, Rodney

Voluntary Standard(s)	APA 87-1, 2001 Version	*Standard for Construction and Approval for Transportation of Fireworks, Novelties, and Theatrical Pyrotechnics*
	AFSL 101 – 115, February 2019	*AFSL Standards for Consumer Fireworks*
	APA 87-1A, 2018 Version	Proposed new voluntary standard for the construction, classification, approval, and transportation of consumer fireworks
	APA 87-1B, 2018 Version	Proposed new voluntary standard for the construction, classification, approval, and transportation of display fireworks
	APA 87-1C, 2018 Version	Proposed new voluntary standard for the construction, classification, approval, and transportation of entertainment and technical pyrotechnics

Mandatory Standard(s) 16 CFR § 1500.17, *Banned Hazardous Substances* and 16 CFR part 1507, *Firework Devices*

Standard(s) Update The voluntary standards, proposed standards, and mandatory standards listed above were not updated during the reporting period.

Purpose To work with AFSL and APA on revising the voluntary standards to strengthen safety provisions addressing hazards associated with consumer fireworks.

Activities In February 2020, staff participated in an APA meeting, including roundtable discussions, where attendees answered technical questions. During the meeting, participants also discussed the status of splitting APA 87-1 into three separate voluntary standards, APA 87-1A, APA 87-1B, and APA 87-1C. This action requires federal approval, because APA 87-1 is incorporated into U.S. DOT statutes. The U.S. DOT originally expected their final rule to be published in summer 2020; however, the final rule had not been published as of the end of the reporting period, and currently, it is expected to be published in early 2021.

Next Action Staff will continue to participate in AFSL and APA meetings, when scheduled.

Flame-Mitigation Devices (FMDs) on Disposable Fuel Containers

Staff Contact	Ayers, Scott	
Voluntary Standard(s)	**ASTM F3429 / ASTM F3429M-20**	***Standard Specification for Performance of Flame Mitigation Devices Installed in Disposable and Pre-Filled Flammable Liquid Containers***
Mandatory Standard(s)	N/A	

Standard(s) Update

In September 2020, ASTM published the new voluntary standard, ASTM F3429/ASTM F3429M-20, *Standard Specification for Performance of Flame Mitigation Devices Installed in Disposable and Pre-Filled Flammable Liquid Containers,* which includes requirements that reduce the likelihood of flame jetting.

Purpose

To work with ASTM to develop a voluntary safety standard with requirements that reduce the likelihood of flame jetting in disposable and pre-filled flammable liquid containers when exposed to an open-flame.

Activities

Two weeks before the start of the reporting period, ASTM issued a subcommittee ballot containing the draft voluntary standard developed by a task group, led by Scott Ayers. The ballot closed in October 2019, and it passed with comments. Therefore, the ballot was automatically included on the next F15 main committee ballot issued on January 13, 2020. That ballot received multiple negative comments, which the task group found persuasive.

The task group met five times during the reporting period. In December 2020, the task group reviewed the comments from the September 2019 subcommittee ballot. In February 2020, the task group reviewed comments from the January 13, 2020, F15 main committee ballot and began editing the draft voluntary standard for a future ballot. In March 2020, and twice in April 2020, the task group met to continue editing the draft voluntary standard in preparation for another ASTM ballot. The task group did not include requirements for the permanency of an FMD and a functional flow test of the disposable container, due to the inability to conduct testing during the pandemic. The task group decided it was better to ballot the draft voluntary standard without these requirements for now, and agreed to address the requirements once development testing can reoccur.

On June 11, 2020, ASTM issued an F15 main committee ballot with the draft voluntary standard as an item. The item passed, and the new voluntary standard, ASTM F3429/ASTM F3429M-20, was approved in August 2020, and it published in September 2020.

In September 2020, CPSC awarded a contract to a testing laboratory to conduct a limited-scope, round-robin study of ASTM F3429/ASTM F3429M-20. The results of the contract study hopefully will confirm repeatability of testing results across multiple testing laboratories.

Next Action Staff will monitor the progress of the round-robin study. Staff will also continue to work with the task group to address FMD permanency and a functional flow test, in addition to any other issues that may arise.

Flammable Refrigerants

Staff Contact Ayers, Scott

Voluntary Standard(s)	UL/CSA 60335-2-24, 2nd Edition	*Safety Requirements for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Refrigerating Appliances, Ice-Cream Appliances, and Ice-Makers*
	UL/CSA 60335-2-40, 3rd Edition	***Household and Similar Electrical Appliances - Safety - Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers***
	UL/CSA 60335-2-89, 1st Edition	*Standard for Safety for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Commercial Refrigerating Appliances with an Incorporated or Remote Refrigerant Unit or Compressor*
	ANSI/ASHRAE 15-2019	*Safety Standard for Refrigeration Systems*
	ASHRAE 15.2P	Potential new voluntary standard for refrigeration systems in residential applications

Mandatory Standard(s) N/A

Standard(s) Update In November 2019, UL published UL/CSA 60335-2-40, 3rd Edition, the latest edition of the *Household and Similar Electrical Appliances - Safety - Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers*, which includes significant revisions that allow for flammable refrigerants.

Purpose To work with SDOs to revise the voluntary standards to strengthen the safety provisions addressing hazards associated with flammable refrigerants (also

known/marketed as “low global warming potential refrigerants” and “natural refrigerants”) used in household refrigerators, freezers, and air conditioners.

Activities

Staff participated in five UL/CSA 60335-2-89 meetings in October 2019, December 2019, January 2020, February 2020, and March 2020. The UL/CSA 60335-2-89 work group is attempting to duplicate many of the requirements for flammable refrigerants contained in the recently approved UL/CSA 60335-2-40, 3rd Edition. Several system types are not included in UL/CSA 60335-2-40, which will be included in UL/CSA 60335-2-89.

Staff participated in nine AHRI Safe Transition Task Force (STTF) meetings during October 2019, January 2020, March 2020, and June 2020. Originally the STTF was focused on educating stakeholders on the transition; identifying gaps or inconsistencies among codes, product standards, and state and federal regulations; and developing training modules for technicians. In June, the STTF was disbanded and replaced by another group focusing only on educating stakeholders.

Staff participated in two ASHRAE Standard 15 meetings in December 2019, and January 2020, at the ASHRAE Winter Conference. ASHRAE Standard 15 serves as an installation code for HVAC and refrigeration equipment. ASHRAE is also developing an installation code specifically for residential applications, currently designated as Standard 15.2P. During the ASHRAE Winter Conference, staff participated in several meetings focused on flammable refrigerants and the development of UL/CSA 60335-2-40, UL/CSA 60335-2-89, and ASHRAE Standard 15. The STTF was also mentioned frequently during the conference.

Staff participated in eight reoccurring teleconferences in April 2020, May 2020, June 2020, July 2020, August 2020, and September 2020 with an industry group looking to harmonize flammable refrigerant requirements among UL/CSA 60335-2-40, ASHRAE Standard 15, and ASHRAE Standard 15.2P.

Staff participated in two ASHRAE Technical Committee (TC) 3.1 meetings: The first during the ASHRAE Winter Conference in February 2020, and the second via teleconference during the ASHRAE Virtual Conference in June 2020. TC 3.1 is interested in further studying odorants in flammable refrigerants, but is looking for other organizations to co-sponsor the next phase of work.

In September 2020, CPSC awarded a contract to study the compatibility of possible flammable refrigerants with various odorants, lubricants, and metal hardware.

Next Action

Staff continues to participate in the development of codes and voluntary standards intended to allow greater quantities of flammable refrigerants in refrigeration and HVAC equipment. Staff intends to continue participating in industry meetings related to harmonizing UL/CSA 60335-2-40, ASHRAE Standard 15, and ASHRAE Standard 15.2P. Staff intends to participate in the

development of the next edition to UL/CSA 60335-2-24 and UL/CSA 60335-2-40. Staff will work with the contractor to study the compatibility of possible flammable refrigerants with various odorants, lubricants, and metal hardware.

Flooring (Slips, Trips, and Falls)

Staff Contact	Mella, Lawrence	
Voluntary Standard(s)	ASTM F2508-16e[1]	*Standard Practice for Validation, Calibration, and Certification of Walkway Tribometers Using Reference Surfaces*
	ASTM WK60578	Potential new voluntary standard test method for walkway friction testing
Mandatory Standard(s)	Petition CP 16-1, Labeling Requirements Regarding Slip Resistance of Floor Coverings (Denied) and Petition CP 18-2 Floor Coverings (Denied)	
Standard(s) Update	The voluntary standards and the petitions listed above were not updated during the reporting period.	
Purpose	To work with ASTM on developing a new voluntary standard or revising the existing voluntary standard to reduce or prevent consumer slips, trips, and falls.	
Activities	Staff analyzed incident data regarding slips and falls. To further staff's understanding of slips, trips, and falls, staff participated in an ASTM F13 committee meeting in Atlanta, GA, in February 2020. At the meeting, the subcommittee acknowledged the NFSI petition to CPSC. Staff is monitoring efforts to develop a new voluntary standard to replace ASTM F2508. The new voluntary standard would be based on an industry report recommending new reference surfaces, correlating human slip research to tribometry, and providing a generic framework for citing any slip research in which human subjects ranked and differentiated multiple reference surfaces. On June 30, 2020, staff attended the F13 main committee meeting, where ASTM provided an overview of the subcommittee meetings and liaison reports. During the meeting, members discussed potential collaboration with F15.03 on bathing surface safety.	
Next Action	Staff will participate in the next ASTM F13 committee meeting, which is tentatively scheduled for February 2021.	

Frame Child Carriers

Staff Contact	Lee, Kevin	
Voluntary Standard(s)	ASTM F2549-14a	*Standard Consumer Safety Specification for Frame Child Carriers*
Mandatory Standard(s)	16 CFR part 1230, *Safety Standard for Frame Child Carriers*	
Standard(s) Update	The voluntary and mandatory standards listed above were not updated during the reporting period.	
Purpose	To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with frame child carriers.	
Activities	Staff participated in the ASTM subcommittee meeting held on October 22, 2019. Staff has been monitoring and providing assistance to the ad hoc, scope, and warnings task groups, which provided reports. Each task group has proposed revisions to F2549. As of the end of the reporting period, the subcommittee chair has not submitted any of the proposed revisions for ballot.	
Next Action	Staff will participate at: (1) the ASTM task group meeting for warning labels and other requirements, scheduled in October 2020, and at (2) the subcommittee meeting, scheduled for November 2020.	

Full-Size Cribs

Staff Contact	Nesteruk, Hope	
Voluntary Standard(s)	ASTM F1169-19	*Standard Consumer Safety Specification for Full-Size Cribs*
Mandatory Standard(s)	16 CFR part 1219, *Safety Standard for Full-Size Cribs*	
Standard(s) Update	The voluntary and mandatory standards listed above were not updated during the reporting period.	
Purpose	To work with ASTM on revising the voluntary standard to strengthen its safety provisions and to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with full-size cribs.	

Activities Staff participated in the ASTM subcommittee meeting on October 23, 2019. During the meeting, the subcommittee discussed clarifying the language regarding screws and testing requirements. ASTM formed a task group, and staff will participate; but the group did not meet during the reporting period. A subcommittee member suggested removing the record-keeping requirement in the voluntary standard, because it is redundant with the CPSIA requirement. Staff suggested moving it to a note within the voluntary standard.

Next Action Staff will participate in the next ASTM subcommittee meeting, scheduled for November 10, 2020. Staff will also participate in task group meetings, when scheduled.

Gas Appliances, CO Sensors (formerly Furnaces – CO Sensors)

Staff Contact Jordan, Ronald

Voluntary Standard(s)

ANSI Z21.47-2016 / CSA 2.3-2016)	*Gas-Fired Central Furnaces*
ANSI Z21.13-2017 / CSA 4.9-2017	*Gas-Fired Low Pressure Steam* and *Hot Water Boilers*
ANSI Z21.86-2016 / CSA2.32-2016	*Vented Gas-Fired Space Heating Appliances*

Mandatory Standard(s) The Commission published an ANPR for Performance Requirements for Residential Gas Furnaces and Boilers, in the *Federal Register* on August 19, 2019 (84 FR 42847).

Standard(s) Update No updates to the voluntary standards or the ANPR occurred during the reporting period.

Purpose To work with technical committees on revising the voluntary standards to strengthen safety provisions addressing hazards associated with carbon monoxide risks due to failure modes, such as disconnected vents and partially blocked vents.

Activities During the reporting period, staff participated in five CSA meetings all during CSA Committees Week in October in Cleveland, OH. Staff participated in the Joint TC meeting, including the Z21/83 TC on Standards for Gas-Fired Appliances and Related Accessories, where the TC, despite concerns raised by staff, voted to disband the working group tasked with developing requirements for CO sensors,. Staff also participated in TSC meetings for gas heaters, gas furnaces, gas boilers, and gas water heaters. All the TSCs are considering requirements that conformance testing be conducted at altitudes less than 2000

feet to prevent performance and safety issues of appliances tested at high altitudes that are used by consumers at lower altitudes. Additionally, the TSC on gas furnaces formed a working group to look at requirements for CO alarms to be installed inside the home before a gas furnace could be installed.

Next Action Staff will continue to participate with CSA and any other SDOs interested in gas appliance safety and CO sensors.

Gas Grills

Staff Contact Ayers, Scott

Voluntary Standard(s) ANSI Z21.58b-2018 / CSA 1.6-2018 *Outdoor Cooking Gas Appliances*

NFPA 58, 2020 Edition *Liquefied Petroleum Gas Code*

Mandatory Standard(s) N/A

Standard(s) Update The voluntary standards listed above were not updated during the reporting period.

Purpose To work with CSA to revise the voluntary standard to strengthen its safety provisions and to ensure that the voluntary standard addresses hazards associated with gas grills and other outdoor gas cooking appliances.

Activities Staff participated in three TSC meetings in February 2020, and June 2020, and two TSC working group teleconferences held in March 2020. During the TSC meetings, the attendees reviewed the proposals from various established working groups for possible industry review and considered establishing or re-establishing working groups to develop proposals for future considerations. During the TSC working group meetings, the work to remove ambiguity with requirements that prevent the storage of a spare LP-gas cylinder under a grill firebox was completed. The working group forwarded a proposal to the TSC for future consideration; however, to date, the TSC has not acted on the proposal.

Additionally in March 2020, staff prepared and submitted a comment to a proposed NFPA 58 TIA that would remove a recently included requirement for fillers of LP-gas cylinders to inspect the valve for damage or excessive wear. The NFPA Standards Council did not approve the TIA, and the requirements remained in the code.

Next Action Staff will continue to participate on the TSC, including participating in future meetings. Staff will continue to monitor NFPA 58.

Gasoline Containers, Child Resistance

Staff Contact	Ayers, Scott	
Voluntary Standard(s)	ASTM F2517-17	*Standard Specification for Determination of Child Resistance of Portable Fuel Containers for Consumer Use*
	ASTM F852/ ASTM F852M-20	***Standard Specification for Portable Gasoline Kerosene, and Diesel Containers for Consumer Use***
Mandatory Standard(s)	16 CFR part 1460, *Children's Gasoline Burn Prevention Act Regulation*	
Standard(s) Update	In August 2020, ASTM published ASTM F852/ASTM F852M-20, the latest revision to the *Standard Specification for Portable Gasoline Kerosene, and Diesel Containers for Consumer Use,* which expands the scope of the standard to allow for metal containers.	
Purpose	To work with ASTM on revising the voluntary standard to strengthen its safety provisions and to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with the poisoning of children from gasoline associated with portable fuel containers.	
Activities	In November 2019, CPSC hosted a subcommittee meeting where a task group was empaneled to work on revising the adult testing requirements of F2517. During the meeting, the subcommittee asked for participation from CPSC's Office of Compliance, so that any potential retesting requirements could be understood. In March 2020, on a subcommittee teleconference, the task group kick-off meeting was postponed until the coronavirus travel restrictions are lifted. CPSC's Office of Compliance agreed to participate in the task group. The task group plans to eventually have an initial face-to-face meeting near Detroit, MI, to look at various gasoline container samples from different eras.	
Next Action	Staff will participate in the task group kick-off meeting, when scheduled. Currently this activity is not expected be begin before April 2021. Staff plans to participate in all subcommittee meetings that may be scheduled.	

Gasoline Containers, Flame-Mitigation Devices (FMD)

Staff Contact	Ayers, Scott

Voluntary Standard(s)	**ASTM F852 / ASTM F852M-20**	***Standard Specification for Portable Gasoline Kerosene, and Diesel Containers for Consumer Use***
	ASTM F2874-20	***Standard Specification for One Time Use Portable Emergency Fuel Containers (PEFC) for Use by Consumers***
	ASTM F3326-19a	*Standard Specification for Flame Mitigation Devices on Portable Fuel Containers*
	ASTM F839-15	*Standard Specification for Cautionary Labeling of Portable Gasoline, Kerosene, and Diesel Containers for Consumer Use*
	UL30, 9th Edition	*Standard for Metal Safety Cans*
Mandatory Standard(s)	N/A	

Standard(s) Update

In August 2020, ASTM published ASTM F2874-20, the latest revision to the *Standard Specification for One Time Use Portable Emergency Fuel Containers (PEFC) for Use by Consumers,* which updates the compatibility fluids used in testing.

In August 2020, ASTM published ASTM F852 / ASTM F852M-20, the latest revision to the *Standard Specification for Portable Gasoline Kerosene, and Diesel Containers for Consumer Use,* which expands the scope of the standard to allow for metal containers.

Purpose

To work with ASTM on revising the voluntary standards to strengthen safety provisions addressing hazards associated with flammable liquid containers.

Activities

On December 13, 2019, ASTM issued a ballot item for ASTM F2874 to re-approve the voluntary standard for emergency, one-time use gasoline containers. The voluntary standard received three negative votes and was balloted again, on May 6, 2020, with changes to address the negative votes. The item passed, and ASTM F2874-20 was published in August 2020, with revisions addressing the compatibility fluids used in testing.

On May 11, 2020, ASTM issued a ballot item for ASTM F852, to expand the scope of the voluntary standard for gasoline containers to include metal containers. The item passed, and ASTM F852/F852 M-20 was published in August 2020.

UL intends to withdraw UL 1313, *Standard for Nonmetallic Safety Cans for Petroleum Products,* in December 2020, based on the belief that ASTM F852/F852 M-20 is superior and should now cover both plastic and metal products.

Staff participated in four ASTM F15.10 subcommittee meetings: November 2019, at CPSC's lab location in Rockville, MD; January 2020 via teleconference; February 2020, via teleconference; and March 2020, via teleconference. The purpose of these meetings, in part, was to expand the scope and requirements in ASTM F852 and ASTM F3326, to include metal containers. Subcommittee members discussed a flow-out test for FMDs in March, but the subcommittee could not reach consensus. The subcommittee will continue to consider a flow-out requirement for FMDs.

Staff also participated in an ASTM F15.10 task group meeting on revising the warning statements on gasoline containers, as prescribed in ASTM F839. This task group will continue to meet into the next fiscal year.

During the reporting period, staff also participated in meetings looking to revise UL 30 for safety containers to a new edition; the next edition of this voluntary standard would fold in several other UL voluntary standards for various containers. The next edition will also include requirements for a FMD on safety containers. Staff participated in nine meetings between October 2019, and June 2020, resulting in a proposed draft new edition to the voluntary standard. To date, UL has sent the proposed draft out for industry review.

Next Action Staff will continue to participate in ASTM F15.10 and UL 30 meetings. Staff will continue to participate in ASTM F839 task group meetings to refine warnings on gasoline containers. Staff will participate in ASTM F2517 task group meetings, when scheduled.

Hand-Held Infant Carriers

Staff Contact Nesteruk, Hope

Voluntary Standard(s) **ASTM F2050-19** ***Standard Consumer Safety Performance Specification for Hand-Held Infant Carriers***

Mandatory Standard(s) 16 CFR part 1225, *Safety Standard for Hand-Held Infant Carriers*

Standard(s) Update In January 2020, ASTM published ASTM F2050-19, the latest revision to the *Standard Consumer Safety Performance Specification for Hand-Held Infant Carriers,* which includes a revision to the instructional literature requirements regarding shopping cart falls.

On July 8, 2020, the Commission published a direct final rule to update the corresponding federal regulation, 16 CFR part 1225, *Safety Standard for Hand-Held Infant Carriers,* to incorporate by reference ASTM F2050-19, with an effective date of January 1, 2021.

Purpose

To work with ASTM on revising the voluntary standard to strengthen its safety provisions and to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with hand-held infant carriers.

Activities

Staff participated in the ASTM subcommittee meeting for hand-held infant carriers held on October 21, 2019, where ballot results were reviewed. During the meeting, the subcommittee found the negative votes on the ad hoc language ballot item to be persuasive. Another ballot item, adding a warning regarding carriers placed on shopping carts, received negative votes that were either withdrawn, or deemed to be editorial. Thus, that ballot item passed. In addition, the following task groups reported during the subcommittee meeting:

- Carry handle testing – the subcommittee discussed a new recommendation to add static and dynamic tests for non-rigid, non-rotating handles. The subcommittee expects further task group work and laboratory testing to follow.
- Warnings – The task group will continue work on the ad hoc language warnings for another ballot.
- Incident data - The subcommittee chair requested updated incident data, which the task group will review at the next meeting.

In December 2019, ASTM approved a revised version of F2050, which was published in January 2020. Pursuant to section 104(b)(4)(B) of the CPSIA, on February 4, 2020, ASTM notified the CPSC of this revision.

On April 15, 2020, staff sent the Commission a briefing package recommending that the Commission accept the revised voluntary standard, and issue a direct final rule updating the reference to the ASTM voluntary standard cited in the hand-held infant carrier rule, 16 CFR part 1225. The Commission voted to accept staff's recommendation. Due to issues raised by the COVID-19 pandemic, the effective date for the direct final rule was delayed until January 1, 2021. On August 11, 2020, staff sent a letter to the President of ASTM, updating her of the status of the direct final rule.

On May 26, 2020, staff attended a teleconference with the ASTM subcommittee chairman for hand-held infant carriers to discuss a statement made by members of the Commission during the voting process for the direct final rule. The statement, made by Commissioner Kaye and Acting Chair Adler, raised concerns about insufficient provisions for safe sleep, for products covered under the voluntary standard that are intended for sleep. This meeting, and a follow-up meeting with the bassinet and cradles subcommittee chairman held on July 7, 2020, resulted in the formation of a task group to address hand-held infant carriers that are used for sleep, but do not currently comply with a sleep product voluntary standard. Staff will participate in this task group.

Next Action

Staff will participate in the task group and also in the next ASTM subcommittee meeting, when scheduled.

High Chairs

Staff Contact	Marques, Stefanie	
Voluntary Standard(s)	ASTM F404-18a	*Standard Consumer Safety Specification for High Chairs*
Mandatory Standard(s)	16 CFR part 1231, *Safety Standard for High Chairs*	
Standard(s) Update	The voluntary and mandatory standards listed above were not updated during the reporting period.	
Purpose	To work with ASTM on revising the voluntary standard to strengthen its safety provisions and to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing high chair hazards.	
Activities	Staff participated in the subcommittee meeting held on October 21, 2019, where the subcommittee reviewed ballot results and proposals for reclining high chair ballot items. Staff reviewed the ballot proposal and provided comments during the meeting. On January 16, 2020, ASTM issued an F15 ballot containing a ballot item on high chairs. The ballot item, revising the stability testing requirements of reclining high chair products, received negative votes, one found to be persuasive by the subcommittee chair. On March 5, 2020, ASTM issued another F15 ballot that contained two items on the high chair voluntary standard pertaining to reclining high chairs. Both ballot items received negative votes, which remain unresolved as of the end of the reporting period.	
Next Action	Staff will participate in the next ASTM subcommittee meeting, scheduled for November 9, 2020.	

Infant Bath Seats

Staff Contact	Kish, Celestine	
Voluntary Standard(s)	ASTM F1967-19	*Standard Consumer Safety Specification for Infant Bath Seats*

Mandatory Standard(s)	16 CFR part 1215, *Safety Standard for Infant Bath Seats*
Standard(s) Update	The voluntary and mandatory standards listed above were not updated during the reporting period.
Purpose	To work with ASTM on revising the voluntary standard to strengthen its safety provisions and to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with infant bath seats.
Activities	To monitor the adequacy of the mandatory standard and its referenced voluntary standard, staff conducted the annual review of incident data associated with bath seats in January 2020, and communicated the results to ASTM. Staff did not identify any new hazard patterns for this product since the last review.
Next Action	Staff will continue to review incident data on infant bath seats and will participate in the next subcommittee or task group meeting, when scheduled.

Infant Bath Tubs

Staff Contact	Kish, Celestine	
Voluntary Standard(s)	ASTM F2670-18	*Standard Consumer Safety Specification for Infant Bath Tubs*
Mandatory Standard(s)	16 CFR part 1234, *Safety Standard for Infant Bath Tubs*	
Standard(s) Update	The voluntary and mandatory standards listed above were not updated during the reporting period.	
Purpose	To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with infant tubs.	
Activities	To monitor the adequacy of the mandatory standard and its referenced voluntary standard, staff conducted the annual review of incident data associated with infant bath tubs in January 2020, and staff communicated the results to ASTM. Staff did not identify any new hazard patterns for this product since the last review.	
Next Action	Staff will continue to review incident data on infant bath tubs and will participate in the next ASTM subcommittee meeting, when scheduled.	

Infant Bouncer Seats

Staff Contact	Wanna-Nakamura, Suad	
Voluntary Standard(s)	ASTM F2167-19	*Standard Consumer Safety Specification for Infant Bouncer Seats*
Mandatory Standard(s)	16 CFR part 1229, *Safety Standard for Infant Bouncer Seats*	
Standard(s) Update	The voluntary and mandatory standards listed above were not updated during the reporting period.	
Purpose	To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with infant bouncer seats.	
Activities	To monitor the adequacy of the mandatory standard and its referenced voluntary standard, staff conducted the annual review of incident data associated with bouncer seats in June 2020, and reported the results of the review to ASTM. Staff did not identify any new hazard patterns for this product since the last review.	
Next Action	Staff will review incident data associated with infant bouncers and attend the next subcommittee meeting, when scheduled.	

Infant Inclined Sleep Products

Staff Contact	Kish, Celestine	
Voluntary Standard(s)	ASTM F3118-17a	*Standard Consumer Safety Specification for Infant Inclined Sleep Products*
Mandatory Standard(s)	Supplemental NPR *Safety Standard for Infant Sleep Products* (84FR 60949)	
Standard(s) Update	On November 12, 2019, the Commission published in the *Federal Register* a supplemental notice of proposed rulemaking for the *Safety Standard for Infant Sleep Products*.	
Purpose	To work with ASTM on revising the voluntary standard to strengthen its safety provisions addressing hazards and form the basis of a federal standard intended to reduce hazards associated with inclined sleep products.	

Activities

Staff submitted a SNPR package to the Commission in October 2019, and it was published in the *Federal Register* on November 12, 2019. The SNPR proposes that any product intended for infant sleep must meet one of the current mandatory infant sleep product safety standards, or it would be required to meet the CPSC bassinet/cradle mandatory standard.

Staff participated in the ASTM subcommittee meeting held on October 21, 019. During the meeting, staff discussed the SNPR.

On December 12, 2019, staff sent a letter to the bassinet subcommittee chairman, Scott Lewis, and the infant inclined sleep products chairman, Rick Rosati. The letter expressed concerns about the safety of various infant sleep products, including in-bed sleepers, baby boxes, and compact bassinets. Mr. Rosati replied via email on December 13, 2019, and suggested a teleconference, including staff, himself, and Mr. Lewis. That teleconference occurred on December 23, 2019, and it included other ASTM members. During the meeting, staff reiterated the position stated in the letter of December 12, 2019, and subcommittee members raised questions about how to proceed to create a standard for these products.

On July 16, 2020, staff sent a second letter to Mr. Rosati, noting that since publication of the SNPR, the subcommittee and their task groups had not met to discuss the proposed modifications outlined in the SNPR. The letter reiterated staff's position and requested holding a subcommittee meeting.

In response to staff's letter, ASTM held a subcommittee meeting for infant inclined sleep products on August 26, 2020. During the subcommittee meeting, the term "Infant Sleep Products" was discussed as a new name for the voluntary standard, which would be consistent with the SNPR, in that it covers all infant sleep products that are safe for sleep. Other task groups provided reports during the meeting.

On September 17, 2020, the Infant Sleep Products Name/Scope/Introduction task group met to discuss changing the name of the voluntary standard to "Infant Sleep Products," and the task group agreed. The task group discussed what products should be included in the scope, but made no final decision on the scope.

On September 29, 2020, the Infant Sleep Product labeling task group met to discuss language for warning labels.

Next Action

Staff will participate in the next ASTM subcommittee meeting, scheduled for November 10, 2020.

Infant Swings

Staff Contact Torres, Carlos

Voluntary Standard(s) **ASTM F2088-20** ***Standard Consumer Safety Specification for Infant and Cradle Swings***

Mandatory Standard(s) 16 CFR part 1223, *Safety Standard for Infant Swings*

Standard(s) Update In November 2019, and July 2020, ASTM published revisions to ASTM F2088, *Standard Consumer Safety Specification for Infant and Cradle Swings*. ASTM F2088-19 included a new requirement and test method for products that use tethered straps for the restraint system. ASTM F2088-20 includes revised warning/labeling language.

Purpose To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with infant swings.

Activities Staff participated in the ASTM subcommittee meeting held on October 22, 2019, where the subcommittee discussed ballot results for three items pertaining to infant swings: tethered strap terminology and test method, introduction revision, and scope and terminology revision. The tethered strap item passed, but the other two items received persuasive negative votes.

In November 2019, ASTM approved and published a revision to the infant swing voluntary standard, ASTM F2088-19, to include the new requirement and test method for tethered straps.

On March 5, 2020, ASTM issued an F15 ballot, containing an item to revise the standards warning/labeling language to be consistent with the ad hoc language already developed. ASTM approved the ballot item and published a revised voluntary standard, ASTM F2088-20, in July 2020.

During a review of incident data, staff identified a nonfatal incident involving the tethered strap of a swing. Staff's testing on the incident swing confirms that it passes the tethered strap requirements of ASTM F2088-20. Staff also identified that a product can pass the test, but may still pose an entanglement and strangulation hazard. Staff prepared a letter to ASTM asking the subcommittee chairman to form a task group to address this hazard. As of the end of the reporting period, the letter had not been sent.

Next Action In October 2020, staff sent the letter regarding the tethered strap hazard to ASTM. Also in October, pursuant to section 104(b)(4)(B) of the CPSIA, ASTM notified the CPSC of the latest revision to ASTM F2088. In response to the notification, staff will prepare a briefing memo to update 16 CFR part 1223, in

accordance with Pub. L. No. 112-28. Staff will also participate in the next ASTM subcommittee meeting, scheduled for November 10, 2020.

Infant Walkers

Staff Contact	Mordecai, Benjamin	
Voluntary Standard(s)	ASTM F977-18	ASTM *Standard Consumer Safety Performance Specification for Infant Walkers*
Mandatory Standard(s)	16 CFR part, 1216 *Safety Standard for Infant Walkers*	
Standard(s) Update	The voluntary and mandatory standards listed above were not updated during the reporting period.	
Purpose	To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with infant walkers.	
Activities	To monitor the adequacy of the mandatory standard and its referenced voluntary standard, staff conducted the annual review of incident data associated with infant walkers in August 2020, and communicated the results to ASTM. Staff did not identify any new hazard patterns for this product since the last review.	
Next Action	The next subcommittee meeting, scheduled for the end of April 2020, was cancelled due to COVID-19. Staff will participate in the next ASTM subcommittee meeting, when scheduled.	

Liquid Laundry Packets

Staff Contact	Hurley, Jill	
Voluntary Standard(s)	ASTM F3159-15	*Standard Safety Specification for Liquid Laundry Packets*
Mandatory Standard(s)	N/A	
Standard(s) Update	The voluntary standard listed above was not updated during the reporting period.	

Purpose To work with ASTM on revising the voluntary standard to strengthen its safety provisions addressing hazards associated with liquid laundry detergent packets.

Activities On October 8, 2019, staff sent a data report to ASTM regarding hospital emergency room visits associated with liquid laundry packets. The data report updates the post implementation phase of data provided to ASTM.

Staff attended an ASTM F15.72 subcommittee meeting on July 15, 2020, where the subcommittee reviewed publicly available data. CPSC staff also reviewed the results of a recently published, peer-reviewed journal article, *"Impact of the Voluntary Safety Standard for Liquid Laundry Packets on Child Injuries Treated in US Hospital Emergency Departments, 2012-2018,"* published in the American Journal of Public Health. The subcommittee requested CPSC data on incidents with seniors.

Staff also attended a Scope task group meeting on July 31, 2020, which continued on August 6, 2020. The goal of the task group is to determine whether the scope of the ASTM voluntary standard should be expanded to include other populations, mainly seniors.

Next Action Staff will participate in the next scope task group meeting and at the next subcommittee meeting, both scheduled for October 2020. Staff will also supply the subcommittee with the requested incident data.

LP Gas Outdoor Fire Pits

Staff Contact Kim, Yeon Souk

Voluntary Standard(s)	ANSI Z21.97-2017 / CSA 2.41-2017	*Outdoor Decorative Gas Appliances*
	NFPA 58, 2020 Edition	*Liquefied Petroleum Gas Code*

Mandatory Standard(s) N/A

Standard(s) Update The voluntary standards listed above were not updated during the reporting period.

Purpose To work with CSA, NFPA and other stakeholders on revising the voluntary standards to strengthen its safety provisions and to ensure that the voluntary standard addresses hazards associated with outdoor gas decorative appliances, such as fire pits.

Activities On October 2019, staff participated in a CSA TSC meeting on Decorative Appliance voluntary standards held in Cleveland, OH, which established two task forces. CSA assigned the first task force to develop a change in the requirements for glass barriers. Staff participated in two meetings for this task force in January 2020 and May 2020, discussing the definition of the "glass viewing area" and adding a safety label instead of the barrier requirement. CSA established the second task force in response to staff's September 2019 letter requesting the TSC develop new requirements for the venturi. To date, the venturi task force has not met.

Additionally, in March 2020, staff prepared and submitted a comment to a proposed NFPA 58 TIA that would remove a recently included requirement for fillers of LP-gas cylinders to inspect the valve for damage or excessive wear. The NFPA Standards Council did not approve the TIA, and the requirements remained in the code.

Next Action Staff will continue to participate on the TSC and in the task force meetings. Staff expects a task force meeting on venturi requirements to be scheduled in the near future. Staff will continue to monitor NFPA 58.

Magnet Sets (Non-Toys)

Staff Contact Harsanyi, Steve

Voluntary Standard(s)	ASTM WK68963	Potential new standard for marketing and labeling of adult magnet sets containing small loose, powerful magnets

Mandatory Standard(s) Petition CP 17-1 Requesting Rulemaking for Magnet Sets (withdrawn on April 22, 2020). Note: Despite the withdrawal, in response to petition CP 17-1, staff submitted an informational briefing package on magnet sets to the Commission, on June 3, 2020.

Standard(s) Update The petition listed above was withdrawn during the reporting period.

Purpose To work with ASTM to develop a voluntary standard to adequately address the hazard associated with ingestion of magnets from magnet sets.

Activities CPSC staff participated in several ASTM subcommittee and task group teleconferences associated with magnet sets on October 10, 2019, October 31, 2019, November 18, 2019, November 21, 2019, November 25, 2019, March 4, 2020, March 19, 2020, and April 7, 2020. These meetings concerned various labeling and packaging requirements to consider for the draft voluntary standard. In addition, ASTM meeting discussions included the scope, and whether the voluntary standard should include performance requirements.

In October 2019, staff wrote a letter to ASTM, expressing concern that relying only on warning information will not effectively reduce the hazard associated with the ingestion of magnets from magnet sets. In October 2019, staff also received approval to vote on ASTM ballot items associated with magnet sets, and staff submitted a negative vote on the initial draft voluntary standard, balloted in December 2019. Staff's comments on the ballot echoed the concerns voiced in staff's October 2019 letter.

In addition to staff's vote, the ballot item received eight other negative votes. The subcommittee did not discuss the disposition of the negative votes at the March 4, 2020 meeting, but at least one of the negatives was found to be persuasive. Due to the persuasive negative, the subcommittee removed the item from ballot.

On March 31, 2020, staff supplied the subcommittee with a summary spreadsheet of incident data, including reports from January 1, 2006 through December 31, 2019.

On May 6, 2020, ASTM issued an F15 ballot containing the new proposed voluntary standard for adult magnet sets. The June 17, 2020 ballot closing report showed that magnet ballot item received 13 negative votes and five comments. Staff submitted one of the negative votes and also provided a rationale letter for the vote. On July 8, 2020, ASTM issued another F15 ballot with 10 items to find the remaining unresolved negative votes to be not persuasive. Staff voted on those 10 ballot items and also provided a comment letter. The letter addresses concerns with the way the ballot was presented, and it provides more supporting information for staff's stance on the inadequacy of relying only on safety information for addressing the identified hazard, including references to staff's 2020 informational briefing package on magnet sets. Those 10 ballot items all passed, and therefore, the remaining negative votes from the May ballot have been found to be not persuasive.

On August 3, 2020, ASTM issued another ballot containing minor changes to the new voluntary standard that was balloted in May, but not yet published. Staff voted on this ballot. The ballot received seven negative votes, and at the end of the reporting period, four remained unresolved.

On September 17, 2020, ASTM issued another F15 ballot to find each of the remaining unresolved negative votes to be not persuasive. Staff voted on these four items. At the end of the reporting period, the ballot results were not known.

Next Action Staff will continue to participate in future ASTM subcommittee and task group meetings. Staff is also preparing an NPR briefing package in FY 2021 regarding adult magnet sets for Commission consideration.

Mowers

Staff Contact	Paul, Caroleene	
Voluntary Standard(s)	ANSI/OPEI B71.1-2017	*Standard for Consumer Turf Care Equipment – Pedestrian-Controlled Mower and Ride-on Mowers – Safety Specification*
	ANSI/OPEI 60335-2-107-2020	*Particular Requirements for Robotic Battery Powered Electrical Lawnmowers*
Mandatory Standard(s)	16 CFR part 1205, *Safety Standard for Walk-Behind Power Lawn Mowers* and Petition CP 19-1 on *Walk Behind Power Lawn Mowers* (withdrawn May 2020)	
Standard(s) Update	The voluntary standards[2] and the mandatory standard listed above were not updated during the reporting period. OPEI withdrew the petition in May 2020.	
Purpose	To work with OPEI on revising their voluntary standards to address hazards associated with walk-behind power lawn mowers.	
Activities	In April 2020, staff submitted a briefing package to the Commission recommending denial of Petition CP 19-1; and in May 2020, OPEI withdrew Petition CP 19-1. In May and July, staff communicated with OPEI to set up a meeting to discuss labels on walk-behind mowers; to date, OPEI has not requested a meeting. In July 2020, OPEI issued a ballot for ANSI/OPEI 60335-2-107-2020 pertaining to the battery requirements for robotic lawnmowers. Staff reviewed the ballot and cast an abstention vote with no comments.	
Next Action	Staff will meet with OPEI to discuss label issues in the withdrawn petition CP 19-01. In addition, staff intends to engage OPEI on the development of their voluntary standard related to riding-mower, back over hazards in FY 2021.	

Nanotechnology

Staff Contact	Matheson, Joanna	
Voluntary Standard(s)	ASTM E3025-16	*Standard Guide for Tiered Approach to Detection and Characterization of Manufactured Silver Nanomaterials in Textiles*

[2] ANSI/OPEI 60335-2-107-2020 was approved during FY 2019, on September 5, 2019.

ASTM E2525-08 (2013)	*Standard Test Method for Evaluation of the Effect of Nanoparticulate Materials on the Formation of Mouse Granulocyte-Macrophage Colonies*
ASTM E2526-08(2013)	*Standard Test Method for Evaluation of Cytotoxicity of Nanoparticulate Materials in Porcine Kidney Cells and Human Hepatocarcinoma Cells*
ASTM WK48313	Potential new guide for collection and generation of environment, health, and safety information for nanomaterials and nanoenabled products
ASTM WK52417	Potential new voluntary standard for determination of total silver in textiles by inductively coupled plasma optical emission spectrometry or inductively coupled plasma mass spectrometry analysis
ASTM WK60373	Potential new voluntary standard for quantitative measurement of the chemoattractant capacity of a nanoparticulate material in vitro
ASTM WK60553	Potential new voluntary standard for evaluation of nanoparticulate material internalization by phagocytic cells in vitro
ASTM WK60554	Potential new voluntary standard for detection of nitric oxide production
ISO/TS 13830:2013	*Nanotechnologies — Guidance on voluntary labelling for consumer products containing manufactured nano-objects*
ISO/DTS 21356-1	Potential new ISO voluntary standard for nanotechnologies -- structural characterization of graphene
ISO/DTR 22293	Potential new ISO voluntary standard for evaluation of methods for assessing the release of nanomaterials from commercial, nanomaterial containing polymer composites
ISO/DTS 21975	Potential new ISO voluntary standard for nanotechnologies -- polymeric nanocomposite films for food packaging -- barrier properties: characteristics and measurement methods
Mandatory Standard(s)	N/A

Standard(s) Update The voluntary standards and potential standards listed above were not updated during the reporting period.

Purpose To work with ASTM and ISO technical committee on revising the voluntary standards to strengthen safety provisions addressing hazards associated with nanotechnology.

Activities In October 2019, staff participated in an ANSI Nanotechnology Standards Panel meeting. The purpose of the meeting was to facilitate a greater understanding of the relationship between voluntary consensus standards and regulations, and to discuss lessons learned on nanotechnology voluntary standards and regulations. Meeting participants also discussed potential steps to advance nanotechnology voluntary standards, the advantages/disadvantages of regulations based on voluntary consensus standards and whether current nanotechnology-related voluntary standards require more specificity for their implementation in regulations.

Staff also participated in ANSI U.S. TAG TC 229 meetings in October 2019, March 2020, and April 2020. The U.S. TAG remains active in ISO standards development, including work on standard terms and definitions for specific nanomaterials and nano-manufacturing, standards on nanomaterial specifications, standards on characterizing nanomaterials, and methodology characterization and nanomaterial applications. Staff also attended the ISO/TC 229 Committee meetings in May 2020. Staff participated in two Working Group meetings (WG3 - Health, Safety and Environmental Aspects of Nanotechnologies and WG5 - Products and Applications).

Staff also participated in the ASTM E56 meetings on nanotechnology in November 2019 and May 2020. During the November 2019 meeting, the subcommittee discussed ballots and ongoing activities, and staff provided information to the subcommittee on a new statistical method (a modified t-test) developed by CPSC and NIST, used to calculate positive or negative determinations when analyzing data from in vitro assays. During the May 2020 meeting, ballot results were reviewed and new work items were discussed.

On August 19, 2020, staff attended the ANSI Nanotechnology Standards Panel workshop on Advanced Materials. The goals of the workshop were to discuss: (1) should existing nanotechnology standards bodies address advanced and emerging materials; and, (2) how to better identify gaps and needs relative to advanced and emerging material standards, and how to prioritize topic areas.

Next Action Staff will continue to be active in the ASTM E56 subcommittees and will participate in the next ISO TC 229 meetings, scheduled for October and November 2020.

National Electrical Code

Staff Contact	Lee, Douglas	
Voluntary Standard(s)	NFPA 70 NFPA 70, 2020 Edition	*National Electrical Code*
Mandatory Standard(s)	N/A	
Standard(s) Update	The voluntary standard listed above was not updated during the reporting period.	
Purpose	To work with the NFPA on revising the code, to strengthen its safety provisions addressing hazards associated with electrical fires, carbon monoxide poisoning, and shock incidents associated with consumer products, including appliances, pools and spas, generators, electrical equipment, and wiring products.	
Activities	During the reporting period, staff prepared incident data and reviewed draft proposals in support of the 2023 NEC code revision cycle.	
Next Action	In FY21, the revision cycle for the 2023 edition of the code will start. Staff will participate in two of the eighteen Code Making Panels, NEC-P02 and NEC-P17.	

Non-Full-Size Cribs and Play Yards

Staff Contact	Nesteruk, Hope	
Voluntary Standard(s)	ASTM F406-19	*Standard Consumer Safety Specification for Non-Full-Size Baby Cribs/Play Yards*
	ASTM F2933-19	*Standard Consumer Safety Specification for Crib Mattresses*
Mandatory Standard(s)	16 CFR part 1220, *Safety Standard for Non-Full-Size Baby Cribs* and 16 CFR part 1221, *Safety Standard for Play Yards*	
Standard(s) Update	The Commission published updates to 16 CFR part 1220, *Safety Standard for Non-Full-Size Baby Cribs* and 16 CFR part 1221, *Safety Standard for Play Yards* during the reporting period, to incorporate by reference the latest revision of the voluntary standard ASTM F406-19. The direct final rule for these standards became effective on January 20, 2020.	
Purpose	To work with ASTM on revising the voluntary standards to strengthen safety	

provisions and to ensure that the voluntary standards and the corresponding federal mandatory standards maintain adequate safety levels addressing hazards associated with non-full-size cribs and play yards.

Activities On October 23, 2019, the Commission published a *Federal Register* notice regarding the direct final rule for non-full size cribs and play yards. The direct final rule incorporates by reference ASTM F406-19, *Standard Consumer Safety Specification for Non-Full-Size Baby Cribs/Play Yards*. Following publication, staff informed the ASTM president, by letter, of the direct final rule. The direct final rule became effective on January 20, 2020.

On October 23, 2019, staff participated in a subcommittee meeting where the members discussed results of a ballot item. The ballot item concerned revising the entrapment test requirement to refer to "product" rather than "crib" to include both play yards and cribs. The ballot item passed. During the subcommittee meeting, the fit and thickness, entrapment in accessories, and hybrid scope task groups provided reports.

In addition to the October 23, 2019 subcommittee meeting, staff participated in several task group meetings:

October 16, 2019	Mattress fit and thickness
November 13, 2019	Ad hoc language
January 1, 2020	Ad hoc language
January 21, 2020	Play yard accessory scope
February 11, 2020	Play yard stability
March 25, 2020	Play yard accessory scope
April 8, 2020	Play yard stability
April 20, 2020	Ad hoc language
June 22, 2020	Play yard stability

On September 17, 2020, ASTM issued a ballot with four items pertaining to the non-full-size crib and play yard voluntary standard. The ballot items were for revisions to the instructions, the accessories requirement, a figure in the stability requirement and ad hoc language. At the end of the reporting period, the ballot results were not known.

Next Action CPSC staff will continue to serve in a leadership role on the mattress fit and thickness task group. Staff will participate in the next ASTM subcommittee meeting, scheduled for November 9, 2020.

Playground Equipment (Home)

Staff Contact Lee, Kevin

Voluntary Standard(s)	**ASTM F1148-20**	***Standard Consumer Safety Performance Specification for Home Playground Equipment***
Mandatory Standard(s)	N/A	
Standard(s) Update	In March 2020, ASTM published ASTM F1148-20, the latest revision to the *Standard Consumer Safety Performance Specification for Home Playground Equipment*, which includes updated requirement for acute angles, and clarification of exemptions associated with non-accessibility.	
Purpose	To work with ASTM on revising the voluntary standard to strengthen its safety provisions addressing hazards associated with home playground equipment.	
Activities	Staff participated in the subcommittee meeting held on November 4, 2019 where the members discussed ballot results. The subcommittee also discussed adding a "fish probe" to evaluate entrapment hazards, testing of rope net climbers, and redefining the platform loading requirements for low-overhead, confined play areas. The subcommittee asked CPSC staff to provide a summary of arm and leg entrapment injury data regarding 18-month-old to 10-year-old children which staff will provide. Per a subcommittee request from the previous meeting, staff also provided a digital version of the slide transition area sketch during the meeting.	
Next Action	Staff will participate in the next ASTM subcommittee meeting, when scheduled. Per the subcommittee's request, staff will provide the requested incident data on entrapments and slide incidents.	

Playground Equipment (Public)

Staff Contact	Lee, Kevin	
Voluntary Standard(s)	ASTM F1487-17	*Standard Consumer Safety Performance Specification for Public Playground Equipment*
Mandatory Standard(s)	N/A	
Standard(s) Update	The voluntary standard listed above was not updated during the reporting period.	
Purpose	To work with ASTM on revising the voluntary standard to strengthen its safety provisions addressing hazards associated with public playground equipment.	
Activities	Staff participated in the subcommittee meetings held on November 5, 2019, May 15, 2020 and August 27, 2020. During the November 2019 meeting, the	

University of Northern Iowa presented on their CPSC contract to conduct a pilot test of playground surfaces around the country. In addition, a task group, which includes CPSC staff, discussed harmonization issues regarding the CPSC's Handbook for Public Playground Safety. At each of the subcommittee meetings, ballot results were reviewed and the various task groups provided reports. The subcommittee also created task groups to develop a guide for equipment installation.

On January 15 and February 7, 2020, staff participated in task group meetings for handbook harmonization. The purpose of the meetings was to review sections of the handbook for which changes could be considered to improve harmonization of the Handbook with ASTM 1487.

Staff also participated in a task group meeting held April 29, 2020 pertaining to fully enclosed structures. The task group discussed topics on how to make fully enclosed play structures climb resistant.

ASTM issued several ballots during the reporting period:

- December 2019: ASTM balloted three items pertaining to references, scope, and trolley rides. All three received negative votes. At the close of the reporting period, the negatives on the former two items remained unresolved, and the latter item (trolley rides) a negative vote was found to be persuasive and thus the item was removed from the ballot.
- March 2020: ASTM balloted two items pertaining to bannister rails/gliders and trolley rides - both received negative votes. The subcommittee found all the negatives pertaining to bannister rails/gliders non-persuasive and all of the negatives on the trolley ride ballot item were subsequently withdrawn.
- June 2020: ASTM balloted six public playground items: cable loading (passed); clearance zones (passed); trolley rides (negative votes, found persuasive); bannister rails/gliders (negative votes, found persuasive); elevated surfaces (negative votes, unresolved) and hazard based approach appendix (negative votes, found persuasive).
- August 2020: ASTM balloted one public playground item pertaining to handrail requirements for ramps. This item received negative votes that were subsequently withdrawn and thus the item passed.

In June 2020, staff obtained voting privileges for the public playground voluntary standard and cast a negative vote, and included a rationale letter, on the June bannister rail/gliders ballot item. The subcommittee discussed staff's negative vote at the August 31, 2020 subcommittee meeting and was found to be persuasive. Staff also submitted a comment letter on this ballot item, raising a concern with how the balloting was done. The letter was also discussed at the August 31, 2020 subcommittee meeting.

Next Action Staff will review and vote on upcoming ballots, supply incident data as requested and participate in next subcommittee meeting, which has been scheduled for November 17, 2020.

Playground Surfacing

Staff Contact	Lee, Kevin	
Voluntary Standard(s)	ASTM F1292-18e[1]	*Standard Specification for Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment*
	ASTM F1951-14	*Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment*
	ASTM F3012-14	*Standard Specification for Loose-Fill Rubber for Use as a Playground Safety Surface Under and Around Playground Equipment*
	ASTM F2223-19a	***Standard Guide for ASTM Standards on Playground Surfacing***
	ASTM F3313-19	*Standard Test Method for Determining Impact Attenuation of Playground Surfaces Within the Use Zone of Playground Equipment as Tested in the Field*
	ASTM F3351-19	***Standard Test Method for Playground Surface Impact Testing in Laboratory at Specified Test Heights***
Mandatory Standard(s)	N/A	

Standard(s) Update

In December 2019, ASTM published ASTM F2223-19a, the latest revision of the *Standard Guide for ASTM Standards on Playground Surfacing*, which includes a revision to section 5.4, the background section of the standard.

In January 2020, ASTM published ASTM F3351-19, a new voluntary standard, titled *Standard Test Method for Playground Surface Impact Testing in Laboratory at Specified Test Heights* (approved in December 2019).

Purpose

To work with ASTM on revising the voluntary standards to address the hazard patterns associated with playground surfacing.

Activities

Staff participated at the ASTM subcommittee meeting F08.63 on playground surfacing held on November 8, 2019, where the members discussed ballot results. In addition, staff of the University of Northern Iowa gave a presentation to the subcommittee regarding the CPSC contract to conduct a pilot test of playground surfaces around the country.
On January 28, 2020, ASTM issued an F08 ballot with three ballot items

pertaining to F2223-19a. All three ballot items propose changes to references contained in the voluntary standard, in different parts of the voluntary standard. All three ballot items had unresolved negative votes at the end of the reporting period.

In FY 2020, ASTM F08.63 issued three subcommittee ballot items to revise ASTM F1292-18e[1]. All three ballot items received negative votes that were found to be persuasive and therefore, the ballot items were removed from consideration.

Next Action ASTM cancelled the spring 2020 F08 committee meetings due to COVID-19. Staff will participate in the next ASTM subcommittee meeting, scheduled for May 2021. Staff is also planning to provide the subcommittee with an incident data summary of playground incidents related to falls on playground surfacing.

Pools, Portable (Child Drowning)

Staff Contact Bathalon, Susan

Voluntary Standard(s)

ASTM F2666-16	*Standard Specification for Aboveground Portable Pools for Residential Use*
ANSI/APSP/ICC-4a-2013	*American National Standard for Above-Ground/On-Ground Residential Pools*
ANSI/APSP/ICC-8 2005 (R2013)	*American National Standard Model Barrier Code for Residential Swimming Pools, Spas, and Hot Tubs*

Mandatory Standard(s) N/A

Standard(s) Update The voluntary standards listed above were not updated during the reporting period.

Purpose To work with ASTM and PHTA (formerly APSP) on revising the voluntary standard to strengthen its safety provisions addressing hazards associated with residential drowning in portable pool products.

Activities On October 3, 2019, November 20, 2019, and March 23, 2020, staff participated in ASTM F15.60 subcommittee meetings to discuss the development of requirements for a child-resistant ladders for portable pools. The subcommittee is considering dimensional specifications for child-resistant ladders.

On May 27, 2020, June 26, 2020, and August 31, 2020, staff participated in ASTM task group meetings to review and discussed proposed requirements for computer-based pool detection systems. The task group is drafting the proposed

requirements with the idea that new safety technology, such as an electronic computer vision, can add notification features to caregivers that a drowning event is occurring. At the last task group meeting, CPSC staff reviewed the annual submersion and drowning data report with the task group.

Next Action Staff will participate in the next ASTM task group meeting on pool drowning detection systems on October 13, 2020.

Portable Bed Rails (Children's)

Staff Contact Nesteruk, Hope

Voluntary Standard(s) **ASTM F2085-19** ***Standard Consumer Safety Specification for Portable Bed Rails***

Mandatory Standard(s) 16 CFR part 1224, *Safety Standard for Portable Bed Rails*

Standard(s) Update In November 2019, ASTM published ASTM F2085-19, the latest revision to the *Standard Consumer Safety Specification for Portable Bed Rails*, which contains a change to the testing sheet material specifications.

In February 2020, the Commission voted to update the corresponding federal regulation, 16 CFR part 1224, *Safety Standard for Portable Bed Rails*, to incorporate by reference ASTM F2085-19, which became effective on July 8, 2020.

Purpose To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with portable bed rails for children.

Activities On October 22, 2019, staff participated in the ASTM subcommittee meeting for portable bed rails. The subcommittee reviewed ballot results and approved the ballot item to revise the test sheet material specifications. In addition, staff supplied incident data for subcommittee review.

In November 2019, ASTM published a revised version of F2085, and pursuant to section 104(b)(4)(B) of the CPSIA, on November 22, 2019, ASTM notified the CPSC of this revision. In February 2020, staff submitted a briefing memorandum to the Commission, recommending that the Commission issue a direct final rule updating the reference cited in the Commission's rule for portable bed rails, 16 CFR part 1224, to reflect ASTM F2085-19. On February 11, 2020, the Commission voted to approve incorporation by reference of ASTM F2085-19 into 16 CFR part 1224. On February 28, 2020, staff advised the ASTM president, by letter, of the direct final rule and the July 8, 2020 effective date.

Next Action Staff will participate in the next ASTM subcommittee meeting, when scheduled.

Portable Generators

Staff Contact Buyer, Janet

Voluntary Standard(s) ANSI/PGMA G300-2018 (Errata Update) *Safety and Performance of Portable Generators*

UL 2201, 2nd Edition *Carbon Monoxide (CO) Emission Rate of Portable Generators*

Mandatory Standard(s) NPR published on November 21, 2016 (81 FR 83556)

Standard(s) Update In April 2020, PGMA published an errata to ANSI/PGMA G300-2018 which added a clause that portable generator packaging must include a label stating that the portable generator complies with ANSI/PGMA G300-2018. Staff was not involved in this update.

Purpose To work with UL and PGMA on revising the voluntary standards to strengthen safety provisions addressing hazards associated with portable generator carbon monoxide (CO) deaths and injuries.

Activities The public comment period on staff's plan to evaluate the effectiveness of the CO hazard mitigation requirements for portable generators in two voluntary standards, PGMA G300 and UL 2201, NIST Technical Note 2048, closed near the end of FY19. During the reporting period, CPSC and NIST staff evaluated the comments, revised the plan, and published a CPSC memorandum on August 12, 2020 that documents the revisions, as well as staff's summaries of all the comments and staff's responses.

In March 2020, UL opened a review of UL 2201, asking STP members to comment and vote on a proposal by NEMA to exclude portable generator/welding machines from UL 2201. Staff submitted a letter to UL, containing staff's comments and vote, in opposition to the proposal.

Next Action Staff will continue to work with NIST staff to execute the revised plan to evaluate the effectiveness of the CO hazard mitigation requirements for portable generators in two voluntary standards.

Portable Hook-On Chairs

Staff Contact	Nesteruk, Hope	
Voluntary Standard(s)	ASTM F1235-18	*Standard Consumer Safety Specification for Portable Hook-On Chairs*
Mandatory Standard(s)	16 CFR part 1233, *Safety Standard for Hook-On Chairs*	
Standard(s) Update	The voluntary and mandatory standards listed above were not updated during the reporting period.	
Purpose	To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with hook-on chairs.	
Activities	To monitor the adequacy of the mandatory standard and its referenced voluntary standard, staff conducted the annual review of incident data associated with hook-on chairs in November 2019, and shared the results with ASTM. Staff did not identify any new incidents or hazard patterns for this product since the last review.	
Next Action	Staff will participate in the next subcommittee meeting, when scheduled.	

Pressure Cookers

Staff Contact	Snyder, Duncan Scott	
Voluntary Standard(s)	UL 136, 8th Edition	*Pressure Cookers*
Mandatory Standard(s)	N/A	
Standard(s) Update	The voluntary standard listed above was not updated during the reporting period.	
Purpose	To work with UL on revising the voluntary standard to strengthen its safety provisions addressing hazards associated with pressure cookers.	
Activities	In September 2020, staff contacted UL and outlined the types of incidents and associated hazards that staff has been investigating, with a request that members of the STP discuss these issues at the next meeting.	

Next Action Staff will provide UL with incident data relating to pressure cooker locking mechanisms and hazards related to premature lid disengagement. Staff will work with UL STP 136 to determine whether the current voluntary standard adequately addresses all potential hazards.

Recreational Headgear Sensors

Staff Contact McCallion, Rick

Voluntary Standard(s)	ASTM F1446-15b	*Standard Test Methods for Equipment and Procedures Used in Evaluating the Performance Characteristics of Protective Headgear*
	ASTM F1447-18	*Standard Specification for Helmets Used in Recreational Bicycling or Roller Skating*
	ASTM F2220-15	*Standard Specification for Headforms*

Mandatory Standard(s) N/A

Standard(s) Update The voluntary standards listed above were not updated during the reporting period.

Purpose To work with ASTM to develop and revise helmet and headgear voluntary standards, and to work with ASTM to develop a new voluntary standard for headgear sensors.

Activities In November 2019, staff participated in the ASTM F08.53 subcommittee meeting on headgear and helmets and also participated in task group meetings on helmet sensors and helmet mounted accessories. During the helmet sensors task group meeting, members reviewed the draft voluntary standard. Task group members are continuing development of a draft voluntary standard.

On May 15, 2020, ASTM F08.53 issued a subcommittee ballot for a new test method for measuring impact attenuation characteristics of helmets under induced rotational loading. The ballot item received several negative votes that were still unresolved at the end of the reporting period.

Also, on May 15, 2020, ASTM issued an F08 main committee and subcommittee concurrent ballot containing two ballot items to update ASTM F1446. The first ballot item, to update the description of the impact test apparatus, passed. Staff expects ASTM will publish a revised voluntary standard reflecting this update in early FY2021. The second ballot item pertained to custom fit helmets and the head forms used for testing. The ballot received two

negative votes that were unresolved at the end of the reporting period.

Next Action CPSC staff will continue to work with the ASTM members in the development of the draft voluntary standard for headgear sensors. Staff intends to participate in the next subcommittee meeting, scheduled for May 2021.

Recreational Off-Highway Vehicles (ROVs)

Staff Contact Paul, Caroleene

Voluntary Standard(s)

ANSI/ROHVA 1-2016	*Recreational Off-Highway Vehicles*
ANSI/OPEI B71.9-2016	*American National Standard for Multipurpose Off-Highway Utility Vehicles*

Mandatory Standard(s) NPR *Recreational Off-Road Vehicles* (79 FR 68964)

Standard(s) Update The voluntary and mandatory standards listed above were not updated during the reporting period.

Purpose To work with ROHVA and OPEI to develop requirements to address fire hazards and debris penetration hazards in off-highway vehicles.

Activities On October 1, 2019, staff sent a letter to OPEI, and ROHVA (along with SVIA, which is the SDO for ATVs, see ATV section above), and included a spreadsheet outlining staff's preliminary analysis of the 84 redacted IDIs that were supplied to the SDOs in FY 2019. In December 2019, although the voluntary standards in question have not formally been opened for revision, staff participated in a meeting with members of OPEI, SVIA, and ROHVA to discuss staff's preliminary analysis of the IDIs. These IDIs pertain to fire or debris penetration hazards in off-highway vehicles. The meeting resulted in general agreement to focus on the two categories with the most IDIs and recalls: fuel systems and engine/exhaust heat.

On March 25, 2020, staff sent a follow-up letter to the three SDOs, summarizing the December meeting results, and asking for another meeting to discuss potential requirements for fuel systems and engine/exhaust heat management, as well as continuing discussion on debris penetration hazards. Staff's letter also included a list of other voluntary standards related to off-highway vehicles (OHVs) whose requirements for fuel system integrity may be considered for ATVs, ROVs, and utility terrain vehicles (UTVs).

Staff was invited to participate at an OPEI and SVIA/ROHVA meeting set for September 9, 2020. On July 28, 2020, staff sent a letter to OPEI and

SVIA/ROHVA requesting that the meeting have a limited agenda focused on fuel systems of OHVs and that the three SDOs consider various industry voluntary standards with fuel system requirements to mitigate fire hazards and to determine their applicability to OHVs.

Staff attended the September 9, 2020 meeting where the following topics were discussed: rollover containment, fuel hose tensile test, fuel system ventilation, and fuel tank structural integrity. OPEI staff stated that prior to this meeting, the SDO members were examining the various fuel system requirements from the aforementioned voluntary standards and possibly presenting proposals in the future.

Next Action Staff will check on the progress of the proposals relating to fuel systems, and will plan for a future meeting with the SDOs to discuss debris penetration hazards. Staff will conduct contract work in FY21 to explore debris penetration hazard and will share results with SDOs. In accordance with the FY2021 Operating Plan, staff will prepare an ANPR on fire and debris penetration in ATVs, ROVs and UTVs.

Safety Locks and Other Household Child Inaccessibility Devices

Staff Contact Lee, Kevin

Voluntary Standard(s)	ASTM WK71048	Potential new voluntary standard for locks and latches used with cabinet doors and latches

Mandatory Standard(s) N/A

Standard(s) Update The potential new voluntary standard listed above was not completed during the reporting period.

Purpose To work with ASTM to develop a voluntary standard to address hazards associated with safety locks and child-inaccessibility devices.

Activities On November 18, 2019, staff participated via teleconference in ASTM F15.76 task group meetings on child safety locks and latches. The task group reviewed incident data previously supplied by staff. In addition, the task group voted to send the draft voluntary standard out to subcommittee ballot.

On February 20, 2020, ASTM issued an F15.76 subcommittee ballot containing the draft voluntary standard for safety locks and latches. The ballot item received negative votes and comments. The subcommittee chair found some of the negatives to be persuasive and staff worked with the chair to address the negatives in a subsequent draft.

On September 17, 2020, ASTM issued an F15 ballot and one of the ballot items was the latest draft voluntary standard. At the end of the reporting period, the ballot results were not known.

Next Action Staff will review the ballot results, when published, and supply incident data to the subcommittee. Staff will also attend the next subcommittee meeting, when scheduled.

Self-Balancing Scooters and Light Electric Vehicles

Staff Contact Mella, Lawrence

Voluntary Standard(s)

ASTM F2641-15	*Recreational Powered Scooters and Pocket Bikes*
ASTM F2642-08 (2015)	*Standard Consumer Safety Specification for Safety Instructions and Labeling for Recreational Powered Scooters and Pocket Bikes*
ASTM WK57360	Potential new voluntary standard for self-balancing scooters and hoverboards
ASTM WK70724	Potential new voluntary standard for commercial electric-powered scooters for adults

Mandatory Standard(s) N/A

Standard(s) Update The voluntary standards and the potential new voluntary standards listed above were not updated during the reporting period.

Purpose To work with ASTM on developing a new voluntary standard or revising the existing standard to strengthen the safety provisions addressing hazards associated with self-balancing scooters and electric-powered scooters for adults.

Activities In November 2019, staff participated in an ASTM subcommittee meeting in Houston, TX, where the subcommittee discussed the ballot results of the draft voluntary standard for self-balancing scooters and hoverboards, ASTM WK57360. The subcommittee found one negative comment persuasive and will revise the draft and ballot it again. Staff also participated in a subcommittee meeting via teleconference in January 2020, where the development of ASTM WK70724, a draft new voluntary standard for commercial electric-powered scooters for adults, was discussed. The subcommittee asked CPSC to provide incident data for these products.

In February 2020, staff sent a letter to the ASTM F15.58 chair, supporting the development of ASTM WK70724 and requesting requirements that address

brake failures, electrical and thermal-related events, software issues, durability (fatigue testing), dynamic and static load testing, environmental conditions, and warning labels and instructions. Staff attached to the letter the incident data the subcommittee requested in January.

On August 4, 2020, staff attended a self-balancing scooters task group meeting and helped work on the revision to the working draft voluntary standard that was balloted last year. The comments from the previous ballot pertained to latching devices, shields/guards, electrical systems, and labeling.

On August 12, 2020, staff attended a task group meeting for commercial electric-powered scooters for adults. During the meeting, CPSC discussed incident data. A majority of the meeting revolved around the scope of the voluntary standard. The task group met again on September 17, 2020 to continue development of the draft voluntary standard. The task group intends to have monthly meetings in order to complete the draft voluntary standard and get it out to ballot.

In September 2020, staff hosted a micromobility forum which included a discussion of hazards associated with electric-powered scooters.

Next Action Staff will participate in the next ASTM task group meeting on October 21, 2020 and future subcommittee or other task group meetings, when scheduled.

Sling Carriers (Infant and Toddlers)

Staff Contact Nesteruk, Hope

Voluntary Standard(s) **ASTM F2907-19** ***Consumer Safety Specification for Sling Carriers***

Mandatory Standard(s) 16 CFR part 1228, *Safety Standard for Sling Carriers*

Standard(s) Update In November 2019, ASTM published ASTM F2907-19, *Consumer Safety Specification for Sling Carriers,* a revised standard that contains miscellaneous wording changes throughout the voluntary standard along with provisions to test two-occupant sling carriers.

On April 20, 2020, the Commission published in the *Federal Register* a direct final rule to update 16 CFR part 1228, *Safety Standard for Sling Carriers,* to incorporate by reference ASTM F2907-19. The direct final rule became effective on July 6, 2020.

Purpose To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards

associated with sling carriers.

Activities On October 22, 2019, staff participated in the subcommittee meeting for sling carriers, where two task groups provided updates: baby wearing apparel and ad hoc formatting requirements. Staff also provided ASTM with incident data in October 2019. During the meeting, the subcommittee reviewed recent ballot results. A ballot item for sling carriers passed, and in November 2019, ASTM approved the revised voluntary standard.

In November 2019, ASTM published a revised version of F2907, and pursuant to section 104(b)(4)(B) of the CPSIA, ASTM notified the CPSC of this revision on January 8, 2020.

In March 2020, staff submitted to the Commission a briefing memorandum recommending that the Commission issue a direct final rule updating the reference cited in the Commission's rule for sling carriers, 16 CFR part 1228, to reflect ASTM F2907-19. The Commission voted to approve incorporation by reference of ASTM F2907-19 into 16 CFR part 1228. The direct final rule was published in the *Federal Register* on April 20, 2020. Also on April 20, 2020, staff advised the ASTM president, by letter, of the direct final rule and its effective date of July 6, 2020.

Next Action Staff will participate in the next ASTM subcommittee meeting, scheduled for November 9, 2020.

Smoke Alarms

Staff Contact Lee, Arthur

Voluntary Standard(s)

UL 217, 9th Edition	***Standard for Single and Multiple Station Smoke Alarms***
NFPA 72, 2019 Edition	*National Fire Alarm and Signaling Code*

Mandatory Standard(s) N/A

Standard(s) Update In January 2020, UL published UL 217, 9th Edition, the latest edition to the *Standard for Single and Multiple Station Smoke Alarms*, which includes a revision to the performance tests for smoke alarms that improve responsiveness and reduce false alarms. This new edition becomes effective June 1, 2021.

Purpose To work with UL, NFPA, and other stakeholders on potential revisions to voluntary standards and codes to strengthen safety provisions addressing hazards mitigated by smoke alarms.

Activities During the reporting period, staff worked with the Smoke and CO Alarm Survey project contractor to improve consumer response to the survey by developing an alternative approach to improve the consumer response rate. OMB approved the new approach in November, and a pilot program launched in December. The pilot program yielded an improved response rate. The contractor prepared a summary report of the pilot program that staff reviewed. CPSC postponed the next phase of the survey until COVID-19 concerns can be addressed.

In January 2020, staff participated in a meeting with UL 217 STP, where the STP members discussed wireless interconnectivity, accelerated battery testing, and extending the lifetime of alarms past 10 years. The members did not reach consensus on any of these topics.

In February 2020, staff participated on a technical panel sponsored by the NFPA Research Foundation. The technical panel discussed the topic of audible alarm signal waking effectiveness. The discussion centered on at-risk populations, such as the elderly, school-age children, the alcohol-impaired, and individuals who are hard of hearing, who do not fully benefit from conventional smoke alarm alerts, particularly during sleeping hours. The technical panel reviewed current and future requirements to optimize the waking effectiveness for alarm and signaling systems to meet the needs of these at-risk groups.

In June 2020, staff participated in a first draft meeting of the next edition of NFPA 72. During this meeting the committee reviewed public input to requirements pertaining to household smoke and carbon monoxide alarms.

Next Action CPSC staff will continue working with the contractor in completing the Smoke and CO alarms survey. Staff will participate in the next UL 217 STP meeting, tentatively scheduled for November 2020. Staff will work with NPFA, UL, and other stakeholders in possibly developing proposals regarding the audible frequency of smoke alarms.

Soft Infant and Toddler Carriers

Staff Contact Nesteruk, Hope

Voluntary Standard(s) ASTM F2236-16a *Standard Consumer Safety Specification for Soft Infant and Toddler Carriers*

Mandatory Standard(s) 16 CFR part 1226, *Safety Standard for Soft Infant and Toddler Carriers*

Standard(s) Update The voluntary and mandatory standards listed above were not updated during the reporting period.

Purpose	To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with soft infant and toddler carriers.
Activities	On October 22, 2019, staff participated in the ASTM subcommittee for soft infant and toddler carriers where the subcommittee reviewed ballot results and approved two proposed changes to the voluntary standard: the flammability requirements revision and the addition of a warning regarding nursing. The chair is holding publication of the revision for a few more ballot items so that all the revisions to the voluntary standard can be published together. In addition, the fastener strength, leg openings, and labeling task groups provided updates during the subcommittee meeting. Staff reviewed incident data from July 13, 2017 through June 8, 2020, and reported the results of the review to the ASTM subcommittee chair on July 31, 2020. Staff did not identify any new hazard patterns.
Next Action	Staff will participate in the next ASTM subcommittee meeting, scheduled for November 9, 2020.

Sports Protective Gear/Football Helmets

Staff Contact	McCallion, Richard
Voluntary Standard(s)	Various headgear voluntary standards developed by NOCSAE
Mandatory Standard(s)	N/A
Standard(s) Update	NOCSAE did not substantially update any voluntary standards associated with headgear during the reporting period. NOCSAE makes periodic minor or editorial changes to their voluntary standards that do not affect the product design or performance.
Purpose	To work with NOCSAE on revising the voluntary standards to strengthen safety provisions addressing hazards associated with football helmets.
Activities	Staff participated in two NOCSAE meetings: October 17, 2019 and January 31, 2020. During the October 2019 meeting, the committee heard a presentation on why the NOCSAE Youth Football Helmet voluntary standard had not progressed past the draft status. The presentation's key point was that unanswered questions remain due to lack of scientific evidence needed to complete the voluntary standard. During the October 2019 meeting, staff and the rest of the subcommittee considered other presentations pertaining to youth helmets standards development.

During the January 2020 meeting, the committee chairman announced that NOCSAE had received ANSI accreditation and would now be developing their voluntary standards using the ANSI Essential Requirements. The committee also reviewed all of the voluntary standards currently under revision.

Next Action CPSC staff will participate in the next NOCSAE Scientific Advisory Committee meeting, when scheduled.

Spray Polyurethane Foam (SPF) Insulation

Staff Contact Bevington, Charles

Voluntary Standard(s)

ASTM D7859-19	*Standard Practice for Spraying, Sampling, Packaging, and Test Specimen Preparation of Spray Polyurethane Foam (SPF) Insulation for Testing of Emissions Using Environmental Chambers*
ASTM D8142-17e[1]	*Standard Test Method for Determining Chemical Emissions from Spray Polyurethane Foam (SPF) Insulation using Micro-Scale Environmental Test Chambers*
ASTM D7297-14	*Standard Practice for Evaluating Residential Indoor Air Quality Concerns*
ASTM WK58354	Potential new voluntary standard for measuring chemical emissions from SPF insulation in a large-scale spray room
ASTM WK58356	Potential new voluntary standard for conducting emission and fate modeling for SPF insulation indoors
ASTM WK40292	Potential new test method for determination of vapor phase organic compounds emitted from SPF using sorbent tubes analyzed by thermal desorption gas chromatography and mass spectrometry

Mandatory Standard(s) N/A

Standard(s) Update The voluntary standards and the potential new voluntary standards listed above were not updated during the reporting period.

Purpose To work with ASTM on developing new voluntary standards to address hazards associated with chemical emissions from spray polyurethane foam insulation.

Activities In October 2019, staff participated in the ASTM D22.05 subcommittee meeting in Houston, TX. During the meeting, staff actively participated in sessions focused on development sessions for ASTM WK58354 and ASTM WK58356 and revisions to ASTM D7297. In addition, attendees participated in a brainstorming session, looking for new topics, ideas, and areas on which the subcommittee should focus.

In January 2020, staff participated in the ASTM D22.05 task group meeting via teleconference. This meeting focused on development of ASTM WK58354 and ASTM WK58356.

In March 2020, staff participated in another ASTM D22.05 subcommittee meeting via teleconference. The subcommittee intended to issue ballots for both ASTM WK58354 and ASTM WK58356 over the summer. The task group prepared the draft voluntary standards for subcommittee review in July, but they have not been balloted as of the end of the reporting period.

Next Action Staff will continue to provide technical support to the subcommittee and the task group in preparing both ASTM WK58354 and ASTM WK58356 for ballot.

Stationary Activity Centers

Staff Contact Lee, Kevin

Voluntary Standard(s) ASTM F2012-18e[1] *Standard Consumer Safety Specification for Stationary Activity Centers*

Mandatory Standard(s) 16 CFR part 1238, *Standard Consumer Safety Specification for Stationary Activity Centers*

Standard(s) Update The voluntary and mandatory standards listed above were not updated during the reporting period.

Purpose To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with stationary activity centers.

Activities Staff participated in the F15.17 subcommittee meeting held on October 21, 2019. During the meeting, the stability task group provided an update to the subcommittee. The strap integrity task group announced that they plan to ballot new requirements. Staff also provided incident data for the subcommittee's review.

On July 24, 2020, staff sent a letter to the subcommittee chair, asking him to set up a meeting to address the strap integrity issues that still remain unresolved. On August 31, 2020, ASTM held a strap integrity task group meeting in response to

the July letter. During the meeting, a proposal for new requirements was developed, including a cyclic test. The task group is developing a rationale for the number of cycles in the test and plans to share the proposal and rationale at the next subcommittee meeting.

Next Action Staff was recently informed that the ASTM subcommittee chair resigned. ASTM is actively searching for a new chair and when one is approved, staff will request a meeting be scheduled to review the rationale for the proposed strap integrity requirements. Staff will also request that ASTM ballot the proposal, immediately after the meeting.

Swimming Pools/Spas, Drain Entrapment

Staff Contact Eilbert, Mark

Voluntary Standard(s) ANSI/APSP/ICC 16-2017 *American National Standard for Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs*

Mandatory Standard(s) 16 CFR part 1450, *Virginia Graeme Baker Pool and Spa Safety Act*

Standard(s) Update The Commission postponed the effective date for the updated *Virginia Graeme Baker Pool and Spa Act* (VGBA) from November 24, 2020 to May 24, 2021.

Purpose To work with PHTA (formerly APSP) to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing entrapment hazards in swimming pools, wading pools, spas, and hot tubs available to the general public, as well as products like pool drain covers.

Activities The VGBA references ANSI/APSP/ICC-16 2017. Last fiscal year, the Commission approved and published in the *Federal Register* an update to the VGBA requirements that incorporates by reference a successor voluntary standard (84 FR 24021) on May 24, 2019, with an effective date for certification of November 24, 2020. PHTA contacted staff in March 2020 and again in May 2020 to request a 6-month delay to the effective date due to disruptions to their members' manufacturing and testing operations as a result of COVID-19.

In August 2020, staff submitted a briefing package to the Commission with a recommendation to delay the effective date of the drain cover mandatory standard to May 24, 2021. The Commission voted unanimously to approve the delay.

Next Action Staff continues to work with the committee to monitor the effectiveness of the voluntary standard and make any revisions necessary.

Swimming Pools/Spas Safety, Vacuum Relief System

Staff Contact	Eilbert, Mark	
Voluntary Standard(s)	PHTA-17 (not yet published)	Potential new voluntary standard for safety vacuum release systems, automatic pump shut-off systems, shut-off systems, and vacuum limiting systems for swimming pools, spas, wading pools, hot tubs, and catch pools
	ANSI/APSP/ICC-7-2013	*Suction Entrapment Avoidance*
	ASTM F2387-2004(12)	*Manufactured Safety Vacuum Release Systems (SVRS) for Swimming Pools, Spas and Hot Tubs*
Mandatory Standard(s)	16 CFR part 1450, *Virginia Graeme Baker Pool and Spa Safety Act*	
Standard(s) Update	The Commission postponed the effective date for the updated *Virginia Graeme Baker Pool and Spa Act* from November 24, 2020 to May 24, 2021.	
Purpose	To work with PHTA (formally APSP) and ASTM on developing the voluntary standards to strengthen safety provisions and to ensure that the voluntary standard maintains adequate safety levels addressing hazards associated with safety vacuum release systems for swimming pools, spas, wading pools, and hot tubs.	
Activities	In March 2020, ASTM issued a ballot containing an item for a revised safety vacuum release system (SVRS) voluntary standard, to be more inclusive and cover additional technologies. The ballot item received a negative vote that was found persuasive. ASTM held a meeting on July 23, 2020, where the negative vote from the March 2020 ballot item on SVRS was reviewed. Proposed changes to address the negative were discussed and on September 17, 2020, ASTM issued another ballot containing an item to revise ASTM F2387. At the end of the reporting period, the comment period was still open on the ballot. In July 2020, staff attended a PHTA-7 meeting to review and revise the Suction Entrapment Avoidance voluntary standard. The discussions focused on updating definitions and various requirements in the voluntary standard. In August 2020, PHTA announced they will engage the Standards Consensus Committee to officially move forward on the development of the PHTA-17 and establish a Standard Writing Committee to address many issues, including variable speed pumps.	

Next Action	Staff will continue to attend PHTA and ASTM meetings when scheduled, and will participate in future development of the voluntary standards.

Table Saws

Staff Contact	Paul, Caroleene	
Voluntary Standard(s)	UL 62841-3-1, 1st Edition	*Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery – Safety – Part 2-1: Particular Requirements for Transportable Table Saws*
Mandatory Standard(s)	NPR *Safety Standard Addressing Blade-Contact Injuries on Table Saws* (82 FR 22190)	
Standard(s) Update	The voluntary standard and NPR listed above were not updated during the reporting period.	
Purpose	To work with UL on revising the voluntary standard to strengthen its safety provisions addressing hazards associated with blade-contact injuries from table saws.	
Activities	Staff reviewed a UL proposal dated October 4, 2019, to remove table saw requirements from UL 987. In December 2019, a resolution on the proposal was reached, and UL revised their voluntary standard for *Stationary and Fixed Electric Tools*, UL 987. All table saw requirements are now covered under UL 62841-3-1.	
Next Action	Staff will update UL on table saw incident data and CPSC rulemaking actions.	

Tents

Staff Contact	Tenney, Allyson	
Voluntary Standard(s)	**ASTM F3431-20**	***Standard Specification for Determining Flammability of Materials for Recreational Camping Tents and Warning Labels for Associated Hazards***
Mandatory Standard(s)	N/A	
Standard(s) Update	ASTM published the new voluntary standard, ASTM F3431-20 *Standard Specification for Determining Flammability of Materials for Recreational*	

Camping Tents and Warning Labels for Associated Hazards in July 2020.

Purpose To work with ASTM on the development of a voluntary standard addressing hazards associated with tent flammability.

Activities During the reporting period, the draft proposed voluntary standard was balloted to the main committee in January and it received three negative votes. In January, the task group, including staff, met and discussed the ballot results. The draft proposed voluntary standard balloted in January was substantially different than the draft proposed voluntary standard balloted to the subcommittee in May 2019; staff found those differences to be unsatisfactory to consumer safety and harmonization. Staff received permission to vote on the next ballot pertaining to the draft proposed voluntary standard. In April, the ASTM F08 main committee issued a ballot containing items to resolve the negative votes from the January ballot and staff submitted a vote. The main committee found the negative votes non-persuasive. This resulted in the initial publication of ASTM F3431.

Staff also participated in an ASTM F08.22 subcommittee meeting in August 2020, where the results of the April ballot were discussed. The subcommittee also discussed: eliminating the requirement that the voluntary standard apply only to tents acceptable for use with camping appliances, the updated Health Canada provisions and options to harmonize, and considerations for appropriate test methods for certain tent products. The subcommittee agreed to form a task group to discuss possible revisions before the next subcommittee meeting. Staff will participate on the revisions task group.

Next Action Staff will continue to participate in future task group and subcommittee meetings. The next task group meeting has not been scheduled. The next subcommittee meeting is tentatively scheduled for January 2021.

Toddler Beds

Staff Contact Kish, Celestine

Voluntary Standard(s) ASTM F1821-19e[1] *Standard Consumer Safety Specification for Toddler Beds*

Mandatory Standard(s) 16 CFR part 1217, *Safety Standard for Toddler Beds*

Standard(s) Update The Commission issued a direct final rule in October 2019 to update 16 CFR part 1217, *Safety Standard for Toddler Beds*, to incorporate by reference the latest revision of the voluntary standard ASTM F1821-19e[1]. The direct final rule became effective on January 27, 2020.

Purpose To work with ASTM to ensure that the voluntary standard and the corresponding

federal mandatory standard maintain adequate safety levels addressing hazards associated with toddler beds.

Activities In October 2019, staff submitted a briefing memorandum to the Commission, recommending that the Commission issue a direct final rule updating the reference cited in the Commission's rule for toddler beds, 16 CFR part 1217, to reflect ASTM F1821-19e[1]. The Commission voted to approve ASTM F1821-19[e1] being incorporated by reference into the 16 CFR part 1217. The rule published in the *Federal Register* on October 25, 2019. On November 13, 2019, staff advised the ASTM president, by letter, of the direct final rule. The rule became effective on January 27, 2020.

Next Action Staff will continue to review incident data on toddler beds and will participate in the next subcommittee or task group meeting, when scheduled.

Torch Fuel and Lamp Oil

Staff Contact White, Sharon

Voluntary Standard(s)	ASTM WK60454	Potential new voluntary standard for torch fuel and lamp oil packaging
Mandatory Standard(s)	N/A	

Standard(s) Update The potential new voluntary standard listed above was not completed during the reporting period.

Purpose To work with ASTM on the development of voluntary standards addressing the hazards associated with: the color and design of torch fuel and lamp oil packaging; the color and odor of torch fuel and lamp oil; and the use and design of containers principally intended to house torch fuel and lamp oil.

Activities In July 2019, the ASTM task group finalized the draft packaging voluntary standard for a ballot to the ASTM F15 main committee. However, the task group chair did not complete the administrative work ASTM needed to submit the draft voluntary standard for ballot until spring 2020. ASTM balloted the draft voluntary standard in June 2020. Staff provided editorial comments, and three members cast negative votes on the ballot. As of the end of the reporting period, the negative votes remain unresolved, and a task group meeting to discuss the negative votes and comments has not yet been scheduled.

Next Action Staff will continue to work with ASTM and the task group to publish a new voluntary standard on torch fuel and lamp oil packaging. Staff will work with the task group to address the recent ballot comments and participate in all future meetings.

Toys

Staff Contact	Mordecai, Benjamin	
Voluntary Standard(s)	ASTM F963-17	Standard Consumer Safety Specification for Toy Safety
Mandatory Standard(s)	16 CFR part 1250, *Safety Standard for Toys*	
Standard(s) Update	The voluntary and mandatory standards listed above were not updated during the reporting period.	
Purpose	To work with ASTM on revising the voluntary standard to strengthen its safety provisions and to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with toys.	
Activities	On May 6, 2020, staff participated in a subcommittee meeting where several task groups provided updates. Those task groups include acoustics, phthalates, expanding materials, microbial, tracking labels and heaving metals. Staff provided feedback on several draft ballot items and the subcommittee reviewed the draft ballot items for expanding toys, phthalates and acoustics during the meeting. Staff also attended an ASTM F15.22 meeting on May 14, 2020 pertaining to tricycles. The ANSI voluntary standard on tricycles is being transferred to ASTM, and will either be part of the toy voluntary standard, or developed as a voluntary separate standard.	
Next Action	Staff will participate in upcoming ASTM task group meetings, when scheduled. Staff will also review and comment on ASTM ballot items associated with the toy standard, as warranted.	

Upholstered Furniture

Staff Contact	Lock, Andrew	
Voluntary Standard(s)	ASTM E1353-16	*Standard Test Methods for Cigarette Ignition Resistance of Components of Upholstered Furniture*
	NFPA 260, 2019 Edition	*Standard Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of*

Mandatory Standard(s) N/A

Standard(s) Update The voluntary standards listed above were not updated during the reporting period.

Purpose To work with ASTM, NFPA, and other stakeholders on revising voluntary standards to strengthen safety provisions addressing hazards associated with fires involving upholstered furniture.

Activities Staff participated in three meetings on upholstered furniture during the reporting period. In December 2019, staff participated via teleconference in the ASTM E05.15 subcommittee meeting. At this meeting, the subcommittee discussed a proposed test method for upholstered furniture based on the State of California's BEARHFTI Technical Bulletin 117-2013; this proposed test method was withdrawn at the conclusion of the discussion.

In April 2020, staff participated via teleconference in an NFPA 260 task group meeting. At this meeting, the task group discussed proposed changes to NFPA 260 originally made in 2016. The committee agreed that some of the changes should be submitted for consideration in 2021, and others should be held for future discussion.

In May 2020, staff participated via teleconference in an NFPA main committee meeting. At this meeting, the main committee discussed a number of voluntary standards under its jurisdiction. The NFPA task group chair summarized the task group's proposed changes for NFPA 260, as determined during the April 2020 meeting.

Stakeholders in both NFPA and ASTM have submitted ballots to update the specification of the SRM cigarette used in NFPA 260 and ASTM E1353.

Next Action Staff will continue to participate in ASTM E05.15 subcommittee meetings and NFPA 260 meetings. The three-year revision cycle for NFPA 260 will begin in FY 2021. Staff will continue to work with ASTM, NFPA, and other stakeholders to address hazards associated with fires involving upholstered furniture.

Washing Machines

Staff Contact Kim, Yeon Souk

Voluntary Standard(s) UL 2157, 4th Edition *Electric Clothes Washing Machines and Extractors*

Mandatory Standard(s)	N/A
Standard(s) Update	The voluntary standard listed above was not updated during the reporting period.
Purpose	To work with UL on revising the voluntary standard to strengthen its safety provisions addressing hazards associated with an unbalanced load condition of top-loading washing machines.
Activities	In December 2019 and July 2020, staff met with AHAM and discussed the status and results of AHAM's test program on the development of requirements for high-speed washing machines. AHAM is preparing a proposal to UL 2157 on forced failure test to ensure containment if an instantaneous, out of-balance condition at high-spin speed occurs. Staff has reviewed the draft and concurs with the proposal, however AHAM members are evaluating the test repeatability. The development of the proposal has been delayed due to the pandemic. AHAM plans to request a UL task group meeting once the proposal is completed. Staff is monitoring the proposal development and plans to participate in future meetings.
Next Action	Staff intends to monitor the AHAM proposal and participate in an anticipated UL task group meeting to review the proposal.

Wearables

Staff Contact	Thomas, Treye	
Voluntary Standard(s)	UL 8400	Potential new voluntary standard for safety for virtual reality (VR), augmented reality (AR) and mixed reality (MR) technology equipment
Mandatory Standard(s)	N/A	
Standard(s) Update	The potential new voluntary standard listed above was not completed during the reporting period.	
Purpose	To work with UL, ASTM, and any other SDOs on the development of voluntary standards for wearable technologies to keep consumers safe.	
Activities	In December 2019, CPSC staff submitted letters to UL and ASTM requesting the development of voluntary standards for wearable technologies with a focus on consumer safety. In response to the letters, staff met with ASTM in February 2020 and UL in July 2020.	

During the February 2020 meeting, ASTM and CPSC staff discussed both wearable technologies and additive manufacturing/3D printing. CSPC staff presented their approach for categorizing wearable technology products, and ASTM described their ongoing research and plans for future wearable technology activities. ASTM will continue to evaluate this technology and identify the industries that should potentially be involved in standards development. The ASTM traditional silo approach does not work with this new technology, which encompasses a broad range of product types. ASTM is looking to develop general voluntary standards that will apply to specific product categories. ASTM reported that they will need multiple committees and multiple resources to address this emerging hazard.

During the July 2020 meeting, UL and CPSC staff discussed both wearable technologies and additive manufacturing/3D printing. UL and CPSC staff confirmed a commitment to continue a strong relationship in pursuing voluntary standards in each topic.

CPSC staff participated in four UL 8400 STP meetings between February 2020 and July 2020. During these meetings, the STP members discussed and arrived at a general agreement on scope and terms of the proposed voluntary standard for virtual, augmented, and mixed reality products, and the group developed a table of product categories and available tests that may be used for these specific product types. Staff asked the STP to consider age limitations for marketing in the voluntary standard, and develop methods to address foreseeable use of the products by children, such as establishing minimum requirements for parental controls. However, the STP has had difficulty establishing and setting limits for many potential safety concerns, including age requirements, due to the deficit of data regarding use of this novel technology.

Several task groups were established during the STP meeting to improve the various requirements. Staff volunteered to participate on four task groups: allergic contact dermatitis, biomechanical stress, age restrictions, and spatial perception. As of the end of the reporting period, only one task group has met. CPSC staff participated in three separate spatial perception task group meetings in September 2020. The aim of the task group is to address the potential of death or severe injury from collisions between VR/AR/MR users and their environment related to partial or full optical occlusion of the user by the device.

Due to the wide array of covered products and capabilities, and the lack of sufficient data for many of the safety concerns, some task group members are pushing for product-specific risk assessments to be conducted by testers, as opposed to global requirements.

Next Action CPSC staff will continue to engage with a range of stakeholders to develop voluntary standards for wearable technologies to identify, address, and mitigate consumer hazards. Staff will continue to work with the UL 8400 STP and the task groups to develop a new voluntary standard for virtual reality, augmented reality and mixed reality technology equipment. Two UL 8400 task group

meetings are scheduled for October 2020.

Window Coverings

Staff Contact	Balci-Sinha, Rana	
Voluntary Standard(s)	ANSI/WCMA A100.1-2018	*Standard for Safety of Corded Window Covering Products*
Mandatory Standard(s)	ANPR published in January 2015 (80 FR 2327)	
Standard(s) Update	The voluntary standard and ANPR listed above were not updated during the reporting period.	
Purpose	To work with WCMA on revising the voluntary standard to strengthen its safety provisions addressing hazards associated with window covering cords.	
Activities	Staff met with WCMA representatives on October 7, 2019, to discuss the current status of the voluntary standard. Ralph Vasami, from WCMA, outlined all of WCMA's outreach efforts regarding the warning requirements associated with custom window coverings, as required by ANSI/WCMA A100.1-2018. Mr. Vasami also stated that manufacturers are trying to understand the new Canadian rule testing requirements, and thus, they do not have the bandwidth to focus on the WCMA voluntary standard improvements. On February 3, 2020, staff sent Mr. Vasami a letter, outlining staff's recommendations for future improvements to the voluntary standard, and included a request to reopen the voluntary standard and discuss staff's recommendations. On September 3, 2020, CPSC staff supplied WCMA with redacted In-Depth Investigation reports of reported incidents involving window coverings that occurred between 2011 and 2109.	
Next Action	Staff will participate in upcoming committee meetings as they are scheduled and will review and comment on any ballots issued by WCMA.	