



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

This document has been electronically  
approved and signed.

**DATE:** November 15, 2017

**BALLOT VOTE SHEET:**

**TO:** The Commission  
Alberta E. Mills, Acting Secretary

**THROUGH:** Patricia M. Hanz, General Counsel  
Patricia H. Adkins, Executive Director

**FROM:** Patricia M. Pollitzer, Assistant General Counsel, Regulatory Affairs  
Meridith L. Kelsch, Attorney, Regulatory Affairs

**SUBJECT:** Advance Notice of Proposed Rulemaking Regarding Clothing Storage Unit Tip  
Overs

**BALLOT VOTE DUE** Tuesday, November 21, 2017

Staff is forwarding to the Commission a briefing package recommending that the Commission publish an advance notice of proposed rulemaking (ANPR) concerning the risk of injuries and death associated with clothing storage units tipping over. The Office of the General Counsel is providing for the Commission's consideration the attached draft ANPR, which seeks comments and initiates rulemaking under the Consumer Product Safety Act (15 U.S.C. §§ 2051-2089).

Please indicate your vote on the following options:

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

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

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

II. Approve publication of the attached document in the *Federal Register*, with changes. (Please specify.)

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

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

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

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

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

IV. Take other action. (Please specify.)

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

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

Attachment: Draft *Federal Register* Notice: Advance Notice of Proposed Rulemaking Regarding Clothing Storage Unit Tip Overs

**Billing Code 6355-01-P**

**CONSUMER PRODUCT SAFETY COMMISSION**

**16 CFR Chapter II**

**[Docket No. CPSC-2017-XXXX]**

**Clothing Storage Unit Tip Overs; Advance Notice of Proposed Rulemaking; Request for Comments and Information**

**AGENCY:** Consumer Product Safety Commission.

**ACTION:** Advance notice of proposed rulemaking.

**SUMMARY:** The Consumer Product Safety Commission is contemplating developing a rule to address the risk of injury and death associated with clothing storage unit furniture tipping over. This advance notice of proposed rulemaking initiates a rulemaking proceeding under the Consumer Product Safety Act. We invite comments concerning the risk of injury associated with clothing storage units tipping over, the alternatives discussed in this notice, and other possible alternatives for addressing the risk. We also invite interested parties to submit existing voluntary standards or a statement of intent to modify or develop a voluntary standard that addresses the risk of injury described in this notice.

**DATES:** Submit comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may submit comments, identified by Docket No. CPSC-2017-XXXX, electronically or in writing (hard copy), using the methods described below. The Commission encourages you to submit comments electronically, by using the Federal eRulemaking Portal.

Electronic Submissions: Submit electronic comments to the Federal eRulemaking Portal at: <http://www.regulations.gov>. Follow the instructions for submitting comments provided on the

website. The Commission does not accept comments submitted by electronic mail (e-mail), except through [www.regulations.gov](http://www.regulations.gov).

Written Submissions: Submit written comments by mail, hand delivery, or courier to: Office of the Secretary, Consumer Product Safety Commission, Room 820, 4330 East West Highway, Bethesda, MD 20814; telephone (301) 504-7923.

Instructions: All submissions must include the agency name and docket number for this rulemaking proceeding. The Commission may post all comments, without change, including any personal identifiers, contact information, or other personal information provided, to:

<http://www.regulations.gov>. Do not submit confidential business information, trade secret information, or other sensitive or protected information that you do not want to be available to the public. If furnished at all, such information should be submitted by mail, hand delivery, or courier.

Docket: For access to the docket to read background documents or comments, go to: <http://www.regulations.gov>, and insert the docket number, CPSC-2017-XXX, into the “Search” box, and follow the prompts.

**FOR FURTHER INFORMATION CONTACT:** Michael Taylor, Project Manager, Directorate for Laboratory Sciences, U.S. Consumer Product Safety Commission, 5 Research Place, Rockville, MD 20850; telephone: 301-987-2338; e-mail: [MTaylor@cpsc.gov](mailto:MTaylor@cpsc.gov).

**SUPPLEMENTARY INFORMATION:**

**I. Background**

The Consumer Product Safety Commission (Commission or CPSC) is aware of numerous injuries and deaths resulting from furniture tip overs. To address this risk, Commission staff reviewed incident data for furniture tip overs and determined that clothing storage units (CSUs),

consisting of chests, bureaus, and dressers, were the primary furniture category involved in fatal and injury incidents. There were 195 deaths related to CSU tip overs between 2000 and 2016, which were reported to CPSC. An estimated 65,200 injuries related to CSU tip overs were treated in U.S. hospital emergency departments between 2006 and 2016. These incident reports indicate that the vast majority of fatal and injury incidents resulting from CSUs tipping over involve children. Eighty-six percent of the reported fatalities involved children under 18 years old, most of which were under 6 years old. Seventy-three percent of the emergency department-treated injuries involved children under 18 years old, most of which were also under 6 years old.

To address the hazard associated with CSU tip overs, the Commission has taken several steps. In June 2015, the Commission launched the Anchor It! campaign. This educational campaign includes print and broadcast public service announcements, information distribution at targeted venues, such as childcare centers, and an informational website ([www.AnchorIt.gov](http://www.AnchorIt.gov)) explaining the nature of the risk and safety tips for avoiding furniture and television tip overs. In addition, CPSC staff prepared a briefing package in September 2016,<sup>1</sup> to identify hazard patterns involved in tip-over incidents, assess existing voluntary standards that address CSU tip overs, and identify factors that may reduce the likelihood of CSUs tipping over. As part of that effort, Commission staff tested a convenience sample of CSUs. The Commission has also pursued corrective actions with several CSU manufacturers and conducted several voluntary recalls of CSUs.

The Commission is considering developing a mandatory standard to reduce the risk of injury associated with CSU tip overs. Commission staff prepared a briefing package to describe the products at issue, further assess the relevant incident data, examine relevant voluntary

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<sup>1</sup> U.S. Consumer Product Safety Commission, Staff Briefing Package on Furniture Tipover (September 30, 2016), available at: <https://www.cpsc.gov/s3fs-public/Staff%20Briefing%20Package%20on%20Furniture%20Tipover%20-%20September%2030%202016.pdf>.

standards, and discuss options for addressing the risk associated with CSU tip overs. That briefing package is available at: [INSERT LINK TO BRIEFING PACKAGE].

## **II. Relevant Statutory Provisions**

To address the risk of injury associated with CSUs tipping over, the Commission is considering developing a mandatory safety standard. The rulemaking falls under the Consumer Product Safety Act (CPSA; 15 U.S.C. 2051-2089). Under section 7 of the CPSA, the Commission may issue a consumer product safety standard if the requirements of the standard are “reasonably necessary to prevent or reduce an unreasonable risk of injury associated with [a] product.” *Id.* 2056(a). The safety standard may consist of performance requirements or requirements for warnings and instructions. *Id.* However, if there is a voluntary standard that would adequately reduce the risk of injury the Commission seeks to address, and there is likely to be substantial compliance with that standard, then the Commission must rely on the voluntary standard, instead of issuing a mandatory standard. *Id.* 2056(b)(1). To issue a mandatory standard under section 7, the Commission must follow the procedural and substantive requirements in section 9 of the CPSA. *Id.* 2056(a).

Under section 9 of the CPSA, the Commission may begin rulemaking by issuing an advance notice of proposed rulemaking (ANPR). *Id.* 2058(a). The ANPR must identify the product and the nature of the risk of injury associated with it; summarize the regulatory alternatives the Commission is considering; and include information about any relevant existing standards, and why the Commission preliminarily believes those standards would not adequately reduce the risk of injury associated with the product. The ANPR also must invite comments concerning the risk of injury and regulatory alternatives and invite the public to submit existing

standards or a statement of intent to modify or develop a voluntary standard to address the risk of injury. *Id.* 2058(a).

After publishing an ANPR, the Commission may proceed with rulemaking by reviewing the comments received in response to the ANPR, and publishing a notice of proposed rulemaking (NPR). An NPR must include the text of the proposed rule, alternatives the Commission is considering, a preliminary regulatory analysis describing the costs and benefits of the proposed rule and the alternatives, and an assessment of any submitted standards. *Id.* 2058(c). The Commission would then review comments on the NPR and decide whether to issue a final rule, along with a final regulatory analysis.

### **III. The Product and Market**

CSUs are freestanding furniture intended for storing clothing. CSUs are typically bedroom furniture, but may be used elsewhere. CSUs are available in a variety of designs (*e.g.*, vertical or horizontal dressers), sizes (*e.g.*, weights and heights), and materials (*e.g.*, wood, plastic, leather). CSUs usually have a flat surface on top and commonly include doors, or drawers for consumers to store clothing or other items. Examples of CSUs include chests of drawers, bureaus, dressers, armoires, wardrobes, portable closets, and clothing storage lockers. CSUs do not include products that are permanently attached or built into a structure or products that are not typically intended to store clothing, such as bookcases, shelves, cabinets, entertainment furniture, office furniture, or jewelry armoires. Additional factors may be relevant for the Commission to define CSUs in a mandatory standard, such as the height of products and design features. The Commission seeks comments about the appropriate parameters of a definition for CSUs.

CSUs are available through various distribution channels. The retail price of CSUs varies, with the least expensive products retailing for less than \$100, and the most expensive selling for several thousand dollars. Less expensive CSUs are usually mass produced, while more expensive products are often handmade. The lifespans of CSUs vary as well. Consumers may use less expensive CSUs for only a few years, while more expensive products may last for generations.

The Commission has not been able to determine the share of CSUs in the overall furniture market because of a lack of information about sales of specific furniture product types or models. However, according to U.S. Census Bureau information, there are approximately 22,600 U.S. firms that manufacture, import, distribute, or retail household furniture, of which CSUs are a subset. Some manufacturers are large and use mass-production techniques; others are smaller and manufacture products individually or for custom orders. The Commission also has been unable to identify information about the number of CSUs that are in use in U.S. households. The Commission requests information about the CSU market, CSU sales, and the number of CSUs in U.S. households.

#### **IV. Risk of Injury**

Commission staff reviewed fatal and nonfatal incidents involving CSU tip overs to determine the age of people involved in these incidents, the types of CSUs and other items involved, the hazard patterns (hazard patterns include activities, behaviors, circumstances, or factors that are associated with incidents) involved, and the types of injuries and deaths that result from these incidents. As the fatal and nonfatal incidents discussed below indicate, the vast majority of CSU tip-over incidents involve children. For that reason, the Commission largely focused its analysis on incidents involving children.

A. *Fatal Incidents*

To identify fatal incidents that involved CSU tip overs, Commission staff reviewed CPSC’s Death Certificates database, In-Depth Investigations database, Injury and Potential Injury Incidents database, and the National Electronic Injury Surveillance System (NEISS) database.<sup>2</sup> Staff identified 195 fatalities related to CSU tip overs that occurred between January 1, 2000 and December 31, 2016 that were reported to CPSC. Of those fatalities, 22 (11 percent) involved seniors age 60 years and older; 6 (3 percent) involved adults between 18 and 59 years old; and 167 (86 percent) involved children under 18 years old, of which the oldest child was 8 years old. Of the 167 fatal incidents involving children, 159 (95 percent) were under 6 years old and 142 (85 percent) were under 4 years old. Table 1 provides the number of child fatalities in age categories, broken out by 6-month increments.

TABLE 1. *Fatal Incidents Involving Children Under 18 Years Old, by Age, Between January 1, 2000 and December 31, 2016.*

<b>Age</b>	<b>Total Fatalities</b>
0 to less than 0.5 years	1
0.5 to less than 1 year	5
1 to less than 1.5 years	21
1.5 to less than 2 years	28
2 to less than 2.5 years	31
2.5 to less than 3 years	23
3 to less than 3.5 years	25
3.5 to less than 4 years	8
4 to less than 4.5 years	7
4.5 to less than 5 years	4
5 to less than 5.5 years	5
5.5 to less than 6 years	1
6 to less than 6.5 years	3
6.5 to less than 7 years	1
7 to less than 7.5 years	0
7.5 to less than 8 years	1
8 to less than 8.5 years	3

<sup>2</sup> Staff reviewed incidents that were in these databases as of June 1, 2017. Reporting is ongoing for these databases, so the reported number of incidents may change. Percentages may not sum to 100, due to rounding.

8.5 to less than 9 years	0
Greater than 9 years	0
<b>Total</b>	<b>167</b>

Children in a sample of 89 of these incidents ranged in weight from 18 to 66 pounds.

Of the 195 total fatal incidents involving all ages, nearly all involved a chest, bureau, or dresser; some of these involved a television falling with the chest, bureau or dresser. Of the 167 fatal incidents involving children, 164 (98 percent) involved a chest, bureau, or dresser, 2 (1 percent) involved a wardrobe, and 1 (less than 1 percent) involved an armoire. Of the 167 child fatalities, 89 (53 percent) involved a television falling in addition to the CSU.

*B. Nonfatal Incidents*

To identify nonfatal incidents that involved CSU tip overs, Commission staff reviewed the NEISS database. The NEISS database contains reports of injuries treated in emergency departments of U.S. hospitals selected as a probability sample of all U.S. hospitals with emergency departments. Using the surveillance information in this database, CPSC can estimate the number of injuries, nationwide, that are associated with specific consumer products. An estimated 65,200 injuries related to CSU tip overs were treated in U.S. hospital emergency departments between January 1, 2006 and December 31, 2016. Of these, 47,700 estimated injuries (73 percent) were to children under 18 years old. Of the injuries involving children, 94 percent involved children under 9 years old and 83 percent involved children under 6 years old. Table 2 provides the estimated number of child injuries treated in hospital emergency departments, by age.

TABLE 2. *Estimated Injuries Treated in Hospital Emergency Departments Involving Children Under 18 Years Old, by Age, Between January 1, 2006 and December 31, 2016.*

<b>Age</b>	<b>Estimated Injuries</b>
Less than 1 year	The number of cases is too small to produce an estimate
1 year	6,300

2 years	13,200
3 years	11,200
4 years	5,800
5 years	2,300
6 years	2,300
7 years	1,800
8 years	The number of cases is too small to produce an estimate
9 years	The number of cases is too small to produce an estimate
10 years	The number of cases is too small to produce an estimate
11 years	The number of cases is too small to produce an estimate
12 years	The number of cases is too small to produce an estimate
13 years	The number of cases is too small to produce an estimate
14 years	The number of cases is too small to produce an estimate
15 years	The number of cases is too small to produce an estimate
16 years	The number of cases is too small to produce an estimate
17 years	The number of cases is too small to produce an estimate

Of the estimated 47,700 incidents involving children, 99 percent involved a chest, bureau, or dresser; the remainder involved armoires, a portable closet, a wardrobe, and a product that was either an armoire or a dresser. In about 30 percent of injuries involving children, a television fell with the CSU.

*C. Severity and Consequences of Injuries*

The types of injuries that can result from CSUs tipping over can range from scratches, cuts, bruises, joint injuries, and bone fractures to potentially fatal injuries, such as skull fractures, closed-head injuries, internal organ injuries, collapsed lungs, spinal injuries, or mechanical asphyxia (which is a form of suffocation that results from a mechanical force (such as furniture) preventing muscle movement necessary for breathing). The severity of injuries depends on various factors, such as the body part hit or trapped by the CSU, the weight and nature of the stationary forces involved (*i.e.*, the CSU and the floor), the magnitude and duration of the force the CSU applies; the duration of oxygen deprivation from mechanical asphyxia; and the ability to call for help or self-rescue. Blunt head trauma can result in death or severe injuries, and oxygen deprivation can lead to permanent brain damage, organ and tissue injury, or death.

Children are particularly vulnerable to the risk of injury and death associated with CSU tip overs because of their physical and cognitive abilities, the circumstances often involved in CSU tip-overs, and their susceptibility to severe injury. Children generally are not strong enough to move heavy furniture when trapped underneath, do not react quickly enough to avoid falling furniture, and lack cognitive awareness of hazards. In addition, many incidents occur when a child is left unattended, reducing the likelihood that a caregiver could quickly rescue the child. Children, in particular, can suffer long-term harm from head injuries, which can affect their motor and emotional development, speech, cognitive ability, and overall quality of life.

Commission staff reviewed fatal incidents and NEISS incidents involving children to identify the types of fatal and nonfatal injuries associated with CSU tip overs. Of the 167 fatal incidents involving children and CSU tip overs that occurred between 2000 and 2016, 71 (43 percent) were the result of head injuries, skull fractures, and brain hemorrhage from blunt head trauma (including crushing injuries and deep scalp hemorrhage). The remaining 96 fatal incidents (57 percent) were the result of chest compression from a child being pinned under a CSU. In 13 of the 167 fatal incidents involving children, the child died despite receiving medical care.

CSU tip-over injuries to children that are treated in hospital emergency departments ranged in severity, including contusions, abrasions, lacerations, fractures, and internal injuries. Of the estimated 47,700 emergency department-treated injuries to children that were associated with CSUs between January 1, 2006 and December 31, 2016, an estimated 17,700 injuries (37 percent) involved contusions or abrasions; an estimated 12,500 injuries (26 percent) involved internal injuries (including closed head injuries); an estimated 6,600 injuries (14 percent) involved lacerations; and an estimated 4,500 injuries (9 percent) involved fractures. Injuries to

children that were reported through NEISS impacted numerous body parts, but the most common was the head (42 percent), followed by the face (15 percent), and trunk (10 percent). Four percent of NEISS injuries involving children and CSU tip overs required hospitalization, whereas 92 percent were treated and released, and 1 percent were observed.

When a television was involved in a CSU tip over, children's injuries were more likely to require hospitalization and involve internal injuries and head injuries than when no television was involved. When a television was involved in a CSU tip over that resulted in injury to a child, 7 percent of injuries required hospitalization (compared with 3 percent when only a CSU was involved); 36 percent of injuries were internal injuries (compared with 22 percent when only a CSU was involved); and 58 percent were head injuries (compared with 36 percent when only a CSU was involved).

#### *D. Hazard Patterns*

CPSC staff analyzed fatal and nonfatal incident reports to identify factors that are associated with CSU tip-over incidents. This analysis revealed that certain user interactions (such as opening multiple drawers) and surroundings (such as specific flooring) were associated with CSU tip overs. To assess relevant incidents in detail, staff reviewed 369 nonfatal incidents involving CSU tip overs that occurred between January 1, 2005 and December 31, 2015, and were reported to CPSC.<sup>3</sup> This data set is useful to identify hazard patterns, but it cannot be used to draw statistical conclusions because it does not include the most recent incident reports, and

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<sup>3</sup> Staff reviewed incidents that were in CPSC's In-Depth Investigations database, Injury and Potential Injury Incidents database, and NEISS database, as of January 15, 2016.

many of the reports do not include detailed information about circumstances surrounding the incidents.<sup>4</sup>

### *1. Televisions*

As the incident data discussed above indicates, in some incidents, televisions tip over with a CSU, often resulting in more serious injuries. Of the 167 child fatalities between 2000 and 2016, 89 (53 percent) involved a television falling in addition to the CSU. Of the estimated emergency department-treated injuries to children between 2006 and 2016, approximately 30 percent involved a television falling with a CSU. In many of these incidents, children were using the CSU like a ladder or step stool, climbing or standing in a lower drawer, to reach the television or other media device (*e.g.*, DVD player, video game system) on top of the CSU.

In the majority of incidents that involved a television and CSU tipping over, the television was a cathode-ray tube (CRT) television, rather than a flat-screen television. CRT televisions are front-heavy, with the majority of their weight in the screen portion facing front. This type of television is no longer manufactured. The Commission continues to consider how best to address the hazard of televisions tipping over. A mandatory Commission rule can only apply to products manufactured after the rule takes effect. Thus, the Commission may not be able to address the hazard discontinued CRT televisions present through rulemaking. To assess the relevance of televisions and regulatory options, the Commission requests comments about the extent to which consumers put televisions on top of CSUs, the types of televisions involved in tip-over incidents, and the impact of televisions on the stability of CSUs.

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<sup>4</sup> In addition to the more common hazard patterns described in this section, there were also incident reports that indicated other scenarios were involved in CSU tip overs, such as moving the CSU, pulling on a portion of the CSU, and no consumer interaction before the incident.

## *2. Opening Multiple Drawers*

Several incident reports indicated that a CSU tipped over when a consumer opened one or more drawers. Of the 369 nonfatal incidents staff reviewed, 50 reported this scenario.

## *3. Climbing*

Several reports indicated that a child was climbing on the CSU at the time of the tip over incident. In some cases, a child was climbing onto or into the CSU to play, and in others, the child was climbing with a purpose other than playing. Examples of play behaviors evidenced in the data include playing hide-and-go-seek, climbing for a challenge or to jump, and sitting in a lower drawer for fun. Examples of purpose-based behaviors include climbing or standing on a lower drawer to reach a television or other item on top of the CSU, standing on a lower drawer to reach or see into an upper drawer, using the CSU to pull into a standing position, scaling the CSU to reach into a crib, and opening drawers to remove clothing.

These behaviors are developmentally expected for children under 6 years old. It is developmentally normal and foreseeable for children in this age group to interact with furniture, such as CSUs, to play by climbing, sitting, or hiding on or in the CSU. It is also developmentally normal and foreseeable for children to interact with CSUs to dress themselves, place and remove items on top of the CSU, and exercise developing problem-solving skills by stepping on lower drawers to reach items in upper drawers or on top of the CSU.

## *4. Location, Flooring, and Contents*

Of the 369 nonfatal incident reports staff reviewed, all of the reports that included enough information to identify the location of the CSU indicated that the CSU was in a bedroom. Of those reports that specified the flooring surface involved, most occurred on carpet; a smaller number of incidents occurred on wood and tile. Of the reports that indicated the CSU tip over

happened on carpeting, nearly all of the incidents involved general stability, such as opening a drawer or no consumer interaction. Of the reports that described the contents of the CSU, most contained only clothing, and very few were empty.

## V. Existing Voluntary and International Standards

### A. Description of Existing Standards

There are five voluntary or international standards that address CSU or storage unit furniture tip overs:

- ASTM F2057-17, *Standard Safety Specification for Clothing Storage Units* (ASTM F2057-17);
- ASTM F3096-14, *Standard Performance Specification for Tipover Restraint(s) Used with Clothing Storage Unit(s)* (ASTM F3096-14);
- ISO 7171:1988, International Organization for Standardization, *Furniture—Storage units—Determination of stability* (ISO 7171);
- AS/NZS 4935:2009, Australia/New Zealand Standard, *Domestic furniture—Freestanding chests of drawers, wardrobes and bookshelves/bookcases—Determination of stability* (AS/NZS 4935); and
- EN 14749:2016, European Standard, *Furniture—Domestic and kitchen storage units and kitchen-worktops—Safety requirements and test methods* (EN 14749).

The products within the scope of each of these standards vary. ASTM F2057-17 applies to furniture intended for clothing storage, typical of bedroom furniture, and more than 30 inches in height, but excludes built-in furniture and shelving furniture, such as bookcases, office furniture, entertainment furniture, and dining room furniture. ISO 7171 applies to freestanding storage furniture, including cupboards, cabinets, and bookshelves that are fully assembled and

ready for use, but excludes wall-mounted and built-in products. AS/NZS 4935 applies to domestic freestanding chests, drawers, and wardrobes over 19.7 inches in height, as well as bookshelves and bookcases more than 23.6 inches. EN-14749 applies to all kitchen, bathroom, and domestic storage units with movable and non-moveable parts.

ASTM International approved ASTM F2057-17 on October 1, 2017, and published it in October 2017.<sup>5</sup> The scope of ASTM F2057-17 specifies that the standard is intended to cover “children up to and including age five.” ASTM F2057-17 includes requirements for stability, labeling, and tip over restraint devices (TRDs).

To assess the stability of a CSU, ASTM F2057-17 requires that the unit withstand two performance tests—one when the unit is loaded, and one when the unit is unloaded. For the loaded test, the CSU must not tip over when each drawer (or door) is open, one at a time, and weighted with 50 pounds. For the unloaded test, the CSU must not tip over when all of the drawers (or doors) are open at the same time. For both stability tests, testing is on a “hard, level, flat surface” and drawers must be open to the outstop (a feature that limits the outward movement of a drawer) or, when there is no outstop, to 2/3 of the operational sliding length, and doors must be open 90 degrees. The standard specifies that if part of the CSU fails, that part should be repaired or replaced and the test repeated.

ASTM F2057-17 also requires a permanent label on CSUs, in a “conspicuous location when in use,” and includes an example label showing warning content and formatting. The standard also includes a test for assessing label permanence.

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<sup>5</sup> Although ASTM F2057-17 was published shortly before this ANPR and staff’s accompanying briefing package, Commission staff was able to review and assess the standard based on the previous version, ASTM F2057-14, which was largely the same as ASTM F2057-17. The only changes in ASTM F2057-17 were to non-substantive provisions (introduction, caveats, and principles on standardization) and warning label requirements. The changes to warning label requirements were the addition of performance requirements for label permanence and the addition of a pictogram in the warning label. Staff considered these changes in their review and assessment.

ASTM F2057-17 requires that TRDs be provided with all products that fall within the scope of the standard and that they comply with ASTM F3096-14. TRDs are supplementary devices that help prevent tip overs. One example of a TRD is a strap that users attach to the back of a CSU and the wall, to stabilize the CSU. ASTM F3096-14 requires TRDs to be tested for strength by affixing one end of the assembled restraint to a fixed structure and applying a 50-pound weight to the opposite end. ASTM F3096-14 also requires instructional literature that includes illustrations of installation methods, step-by-step instructions, and a list of parts with pictures.

The three international standards—ISO 7171, AS/NZS 4935, and EN 14749—address many of the same key performance requirements as the voluntary ASTM standards. Table 3 compares the key elements in each of the standards.

TABLE 3.—*Key Performance Requirements in Voluntary and International Standards Addressing Storage Unit Furniture Tip Overs.*

	<b>Test Mass</b>	<b>Minimum Furniture Height</b>	<b>Element Breakage</b>	<b>Element Extension</b>	<b>TRDs</b>	<b>Warning Labels</b>	<b>Load and Force Test</b>
ASTM F2057-17	50 lbs	30 in	Repair, if possible	To outstop or 2/3	Required	Required	None
ISO 7171	Not specified <sup>6</sup>	Not specified	Not specified	2/3 extension	Not mentioned	Not mentioned	None
AS/NZS 4935	29 kg (63.88 lbs)	500 mm (19.7 in)	Fail	2/3 extension	Strongly recommended	Required	None
EN 14749	75 N (16.8 lbs)	Not specified	Not specified	To outstop or 2/3	Not mentioned	Not mentioned	Yes

ISO 7171 testing requirements address only stability. ASTM F2057-17 and AS/NZS 4935 include requirements for both stability testing and warnings. EN 14749 includes stability

<sup>6</sup> ISO 7171 does not include pass/fail criteria for loaded stability testing. Instead, it directs testers to continue to increase the force until a portion of the product “just lifts away from the floor.”

requirements, as well as strength and durability requirements. The stability test requirements in ASTM F2057-17 and AS/NZA 4935 are similar in that both require one empty drawer to be open for loaded testing. In contrast, EN 14749 requires that all drawers in a row (not column) be open simultaneously, but specifies a lower force than ASTM F2057-17 and AS/NZA 4935. EN 14749 also includes two further stability tests to assess a vertical force and a loaded test with force applied. ASTM F2057-17 is the only standard that requires TRDs.

*B. Assessment of Existing Standards*

Commission staff assessed the requirements in each of the existing standards and determined that the two ASTM standards are the most effective existing standards. Nevertheless, Commission staff preliminarily believes that the existing standards do not adequately reduce the risk of CSU tip overs. Staff believes that the two ASTM standards are more effective than the international requirements primarily for two reasons. First, although it may appear that EN 14749 is the most stringent standard because it requires additional stability tests, the additional tests are not as severe as applying a larger force to the front edge of an empty unit, as ASTM F2057-17 and AS/NZA 4935 require. Second, ASTM F2057-17 is the only standard that requires TRDs. The Commission's Division of Mechanical Engineering staff believes that TRDs are an important component to effectively prevent CSU tip overs. For these reasons, Commission staff believes that the ASTM standards are the most stringent existing standards, and therefore, focused on these standards when assessing the effectiveness of existing standards that address CSU tip overs. However, as discussed below, there are several provisions in the ASTM standards that staff preliminarily believes do not adequately address the risk of CSU tip overs.

## *1. Scope*

The scope of ASTM F2057-17, which limits the height of CSUs and age of children it addresses, may not adequately reduce the risk of injury associated with CSU tip overs. First, the scope of the standard is limited to addressing CSUs that are more than 30 inches in height. However, there have been incidents involving CSUs that are 30 inches tall or less. These products may present a hazard particularly to children because low-height CSUs may be intended for children and these products can weigh as much as 100 pounds.

Second, the scope of ASTM F2057-17 states that that the target population for injury reduction is “children up to and including age five.” However, as the incident data demonstrate, children as old as 8 years old have been killed and injured by CSU tip overs. In particular, children under age 6 are most commonly involved in incidents. The “age five” specified in the standard appears to include only children up to exactly age five (*i.e.*, 60 months), however, and not children between their fifth and sixth birthdays (based on the 50-pound stability test weight, which represents the weight of children 60 months old). In addition, hazard patterns, such as opening multiple drawers, present a risk of injury to users of any age.

## *2. Stability*

There are also several components of the stability testing provisions in ASTM F2057-17 that staff preliminarily believes are not adequate to reduce the risk of injury associated with CSU tip overs.

First, the standard requires that stability testing occur on a “hard, level, flat surface.” This does not reflect the surfaces on which CSUs may rest in consumers’ homes. For example, floors in a home may not be level, and carpeting is not flat. As the incident reports suggest, when a flooring type was reported, carpeting was more commonly involved in CSU tip-over incidents

than other types of flooring. Assessing the impact of alternate surfaces on stability may be necessary to accurately assess the stability of a product. In addition, the standard does not provide a detailed definition of a “hard, level, flat surface.” Relevant details may include a surface flatness tolerance (*e.g.*,  $\pm 0.1^\circ$ ) over a certain area or a specific type of flooring surface (*e.g.*, Type IV vinyl tile).

Second, the requirement that testing occur with drawers open to the outstop or, if there is no outstop, to 2/3 of the operational sliding length, is unclear and creates testing inconsistencies. For example, staff has tested CSUs with outstops that are significantly less than 2/3 of the operational sliding length, the location of the outstop can impact proper placement of the test weight on the drawer, the standard does not address CSUs with multiple outstops, and the standard does not specify a minimum operational sliding length, which would facilitate testing.

Third, the unloaded stability test procedure may not reflect conditions during actual consumer use. This test requires that all drawers are empty and open simultaneously. However, when contents were reported in CSU tip-over incidents, CSUs generally contained clothing.

Fourth, staff has several concerns with the loaded stability test procedure. The 50-pound test weight is not consistent with the age and weight of victims. The majority of reported CSU tip-over incidents involved children under 6 years old. As such, the test weight in the standard does not reflect the weight of children involved in the majority of incidents, which is approximately 60 pounds (for the 95<sup>th</sup> percentile weight of children just under six years old, according to Centers for Disease Control growth charts). In addition, the test weight tolerances may impact the repeatability of testing. ASTM F2057-17 allows a tolerance of  $\pm 1$  pound for each of the two 25-pound test weights, which means the total weight can range from 48 to 52 pounds, plus the weight of the fastening hardware and strap. Such a wide tolerance may produce

variation in test outcomes, which could result in the same CSU passing and failing during multiple tests.

Fifth, the standard's allowance for the replacement or repair of a failed component may be problematic. For example, this provision does not include a testability requirement, does not account for a failure that cannot be repaired or replaced, and does not account for design-to-fail features that prevent tip overs.

Sixth, during CPSC testing, staff identified several additional issues related to the specificity and clarity of the test procedures in ASTM F2057-17. For example, the standard does not address how to apply test weights to drawers with center components (*e.g.*, handles), does not include a timeframe in which to apply and maintain the test weight, and does not address how to place weights in shallow drawers to avoid contact with the drawer bottom.

### *3. Labeling*

Commission staff has concerns with the location and content requirements for warning labels in ASTM F2057-17.<sup>7</sup> With respect to location, the standard specifies that a label must be in a “conspicuous location when in use” but does not provide further details. For a warning label to be effective, it must be in a location where users will see it. For example, users are not likely to notice or read a label in a lower drawer because it is outside their line-of-sight and they would have to crouch to read it. In contrast, if a label is in a drawer at eye level, an adult, parent, or caregiver is more likely to notice and read the label. For this reason, the label placement provision in the standard may not be adequate for the label to be effective.

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<sup>7</sup> Staff also expressed concerns with the label permanence requirements in ASTM F2057-14 in the 2016 briefing package (U.S. Consumer Product Safety Commission, Staff Briefing Package on Furniture Tipover (September 30, 2016)). However, those concerns have been resolved with the label permanence requirements added to ASTM F2057-17.

Staff also has concerns with the hazard communication statements ASTM F2057-17 requires on a label. First, the label does not allow for customization of hazard avoidance statements for different unit designs. Second, the warning messages may not reflect the hazard patterns demonstrated in the incident data. Third, the warning language may not be easy to understand, may not motivate consumers to comply, and contradicts typical CSU uses. For example, the warning label states that consumers should not open multiple drawers simultaneously, but this contradicts common consumer use. Another example is the warning label statement that users should not place a television on a CSU, unless it is specifically designed to accommodate one. The CSU manufacturer, not the consumer, is in the best position to determine whether a CSU is designed to accommodate a television.

#### 4. TRDs

Commission staff believes that the TRD requirements in ASTM F3096-14 do not adequately assess the strength of TRDs under conditions in which they are commonly used. Staff believes the following provisions are inadequate. First, the test method in ASTM F3096-14 only addresses TRD designs that have a linear connection to the means of attachment (strap-style TRDs). This test does not account for varied or innovative TRD designs. Second, the test does not examine the strength of all of the components of a TRD (*e.g.*, brackets, fastener). Third, the test does not simulate the types of materials to which consumers are likely to secure TRDs. Fourth, the standard does not include explicit criteria for determining whether a TRD passes or fails the test.

## **VI. Regulatory Alternatives the Commission Is Considering**

The Commission is considering several alternatives to address the risk of death and injury associated with CSU tip overs.

### *A. Mandatory Standard*

The Commission could issue a mandatory standard addressing the hazard associated with CSU tip overs. A mandatory standard could include performance requirements, warning and instructional requirements, or both. However, warning and instructional requirements alone may not be adequate to address the risk because they rely on consumers noticing, reading, and following the warning. The Commission may consider the following factors in developing performance and warning requirements:

#### *1. Scope and Definition of CSUs*

In developing a mandatory standard, the Commission would need to consider the appropriate scope for the standard, including the types of products the standard would cover, the hazard scenarios it would address, and whether to focus on a particular target population for injury reduction. For example, CPSC would need to consider whether to limit the scope of a standard to the CSU tip-over hazard posed to children under 6 years old. Such a scope may be appropriate because the large majority of CSU tip over injuries and deaths involve children under 6 years old. However, it may also be appropriate not to limit the scope of the standard because some injuries and fatalities have involved older children and adults, and some demonstrated hazard patterns (*e.g.*, opening multiple drawers) involve a risk of injury to all ages.

Similarly, CPSC also must consider how to define CSUs that are subject to a mandatory rule. Defining CSUs by certain characteristics may be appropriate. Such characteristics could

include product height or weight, product types, or product features, reflecting the characteristics of products involved in incidents.

## *2. Stability*

The Commission believes that it may be appropriate to consider performance requirements and test methods that simulate actual use, including weighting a CSU to represent common use, dynamic testing to represent a child climbing (exerting a downward force), and testing that reflects actual floor surfaces in homes. In developing a mandatory standard, the Commission would consider ways to address the hazard patterns demonstrated in the incident data, such as:

- A child under 6 years old (weighing approximately 60 pounds) climbing on a CSU to play;
- A child under 6 years old (weighing approximately 60 pounds) standing on a lower drawer to reach into an upper drawer;
- A consumer (of any age) fully opening multiple drawers simultaneously that contain items typically stored in a CSU; and
- A CSU on a soft surface that simulates average carpet.

## *3. Labeling*

Clear and explicit requirements regarding the content and placement of warning labels may assist in reducing the risk of injury associated with CSU tip overs. This may include identifying a conspicuous location on CSUs for a warning label; allowing for customization of hazard-avoidance statements, based on unit designs; comparing warning messages with incident data to make sure that the known hazardous situations are addressed; and including warning content that is easy to understand and consistent with the way consumers typically use CSUs.

#### *4. TRDs*

TRDs are an important feature for reducing the risk of CSU tip overs. To assess the effectiveness of TRDs at preventing tip overs, performance requirements and test methods that assess the strength of the entire TRD system and reflect the circumstances under which TRDs are likely to be used (including the materials to which consumers are likely to attach them and the forces to which they are likely to be subjected) would be useful.

##### *B. Rely on Voluntary Standards*

The Commission could rely on the voluntary ASTM standards—ASTM F2057-17 and ASTM F3096-14—that address CSU tip overs. If the Commission determines that the voluntary standards adequately reduce the risk of injury associated with CSU tip overs, and it finds that there is substantial industry compliance with the standards, then the Commission must rely on the voluntary standards, instead of issuing a mandatory standard. 15 U.S.C. 2058(b)(2).

However, as discussed above, the Commission preliminarily believes that the ASTM standards do not adequately reduce the risk of injury associated with CSU tip overs. The Commission is assessing the level of compliance with the voluntary standards.

##### *C. No Regulatory Action*

The Commission could rely on methods other than mandatory or voluntary standards to address the risk of injuries associated with CSU tip overs. This may include relying on product recalls or promoting the ongoing Anchor It! educational campaign. These alternatives may not be as effective at reducing the risk of injury as a mandatory standard. Recalls only apply to an individual manufacturer and product and do not extend to similar products. Recalls also can only address products that are already on the market, and cannot prevent unsafe products from

entering the market. As for educational campaigns, staff does not have information regarding the effectiveness of the Commission's education campaign to date.

## **VII. Request for Comments and Information**

The Commission requests comments on all aspects of this ANPR, but specifically requests comments regarding:

- data about the risk of injury associated with CSU tip overs;
- studies, tests, or surveys analyzing furniture tip-over injuries, including the severity and costs associated with injuries;
- the alternatives the Commission is considering, as well as additional alternatives for addressing the risk of injury;
- the appropriate scope of a mandatory standard and definition of CSUs, including the type of products it should address (*e.g.*, other furniture; televisions; all CSUs; CSUs with certain features or over a certain height, such as 30 inches) and the ages it should address (*e.g.*, children under 6 years old, all children, or all ages);
- the effectiveness of the stability, warning, and TRD requirements being considered;
- studies, tests, or surveys analyzing the number and type of televisions (*i.e.*, CRT or flat screen) or other large objects placed on top of CSUs and the impact of those objects on the stability of the CSU;
- studies, tests, or surveys analyzing the use of aftermarket products that address tip-over hazards (*e.g.*, wall straps, anchors) and their effectiveness at reducing tip overs;
- information or studies about how characteristics of the flooring surface under a CSU may impact the stability of the CSU and the effectiveness of a stability standard;

- a suitable definition for a soft surface that could serve as a surrogate for “average” or typical carpet;
- the effectiveness of voluntary or international standards at reducing the risk of injury associated with CSU tip overs;
- compliance with ASTM F2057-17 and ASTM F3096-14;
- CSU retail sales or shipments, especially information about the type of CSUs sold and the number of units sold in recent years;
- the number of CSUs in use;
- studies, tests, or descriptions of technologies or design changes that address tip-over injuries and estimates of costs associated with those features, including manufacturing costs and wholesale prices;
- the expected impact of technologies or design changes that address tip-over injuries on manufacturing costs or wholesale prices;
- the potential impact of design changes to address CSU stability on consumer utility; and
- information about whether any stability requirements for CSUs in either a voluntary standard or potential mandatory rule could have a disparate impact on small entities, such as small manufacturers or importers.

In addition, the Commission invites interested parties to submit any existing standards, or portions of them, for consideration as a consumer product safety standard. The Commission also invites interested persons to submit a statement of intention to modify or develop a voluntary consumer product safety standard addressing the risk of injury associated with CSU tip overs, including a description of the plan to develop or modify such a standard.

Please submit comments in accordance with the instructions in the **ADDRESSES** section at the beginning of this ANPR.

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

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Alberta E. Mills  
Acting Secretary  
Consumer Product Safety Commission

DRAFT



## Staff Briefing Package

# Advance Notice of Proposed Rulemaking: Clothing Storage Units

November 15, 2017

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United States  
Consumer Product Safety Commission  
Bethesda, MD 20815

This document has been electronically  
approved and signed.

November 15, 2017

Memorandum

**TO :** The Commission  
Alberta E. Mills, Acting Secretary

**THROUGH:** Patricia M. Hanz, General Counsel  
Patricia H. Adkins, Executive Director  
DeWane Ray, Deputy Executive Director for Safety Operations

**FROM :** George A. Borlase, Ph.D., P.E., Assistant Executive Director  
Office of Hazard Identification and Reduction  
Michael Taylor, Project Manager, Furniture Tipover  
Division of Mechanical Engineering, Directorate for Laboratory Sciences

**SUBJECT :** Advance Notice of Proposed Rulemaking: Clothing Storage Units

## **I. ISSUE**

This briefing package provides an advance notice of proposed rulemaking (ANPR) to initiate a rulemaking proceeding that could result in a rule establishing mandatory performance requirements, labeling requirements, or both, to reduce the risk of serious injury or death from the tip over of clothing storage units (CSUs), including products such as chests, dressers, armoires, and portable closets.

## **II. BACKGROUND**

CSUs, generally, are free-standing furniture intended to store clothing. Commonly used as bedroom furniture, CSUs may also be used elsewhere. Typical examples of CSUs include dressers, chests of drawers, and armoires. Numerous injuries and deaths have resulted from CSUs tipping over. These incidents involved consumers of varied ages, but CPSC incident data indicate that 95 percent of deaths and 83 percent of NEISS injuries were to children younger than 6 years old.

To date, the Commission has taken several steps to address CSU hazards. In June 2015, the Commission launched an educational campaign (Anchor It!), which includes public service announcements, information distribution, and an informational website. In addition, the Commission has conducted several voluntary recalls of CSUs. In September 2016,<sup>1</sup> staff prepared a briefing package that assessed the effectiveness of the voluntary standards, ASTM F2057 – 14, *Standard Safety Specification for Clothing Storage Units*, and ASTM F3096 – 14, *Standard Performance Specification for Tipover Restraint(s) Used with Clothing Storage Unit(s)*. The staff briefing package not only evaluated the nature of the hazard and requirements associated with CSUs, but it also addressed tip over hazards to children up to age 6 and hazard patterns indicated by the incident data. In preparation for that briefing package, staff identified the types of CSUs available, from furniture retailers and manufacturers, and staff tested a convenience sample from that total. While testing CSUs during 2016 and 2017, staff found that many of the samples did not conform to the stability requirements of ASTM F2057-14 and/or ASTM F3096-14. Subsequent corrective actions, initiated by the Office of Compliance with the cooperation of several manufacturers have been publicly announced. Staff notes that it can be difficult to determine the compliance of a product involved in an incident because the CSU is often damaged in the incident or discarded by the consumer after the incident.

In the CPSC’s 2017 Operating Plan, the Commission directed staff to prepare an ANPR to address furniture tip overs that included CSU tip over incidents. Staff reviewed CPSC incident data to identify and evaluate the hazard patterns, assessed the effectiveness of the voluntary standards, and explores ways that CPSC could reduce the risk of death and injuries, particularly to children, from CSU tip overs.

The discussion below summarizes technical analyses of the incident data, severity and health consequences of the injuries, the use characteristics and risk factors associated with CSUs, and the design factors related to CSU tip overs. The discussion also includes a summary of available market information. The memorandum concludes with a discussion of options available to the Commission to reduce the risk of fatalities and severe injuries associated with CSU tip overs.

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<sup>1</sup> John Massale, “*Staff’s Briefing Package on Furniture Tipover*” September 2016, U.S. Consumer Product Safety Commission. <https://www.cpsc.gov/s3fs-public/Staff%20Briefing%20Package%20on%20Furniture%20Tipover%20-%20September%2030%202016.pdf>.

### III. DISCUSSION

#### A. *The Products*

Staff of CPSC's Office of Hazard Identification and Reduction reviewed incident data on television, furniture, and appliance instability and tip overs.<sup>2</sup> The largest hazard category identified, which involved the tip over of furniture, such as chests, bureaus, or dressers, resulted in serious injuries, including fatalities to consumers. Therefore, this briefing package focuses on CSUs, which include chests, bureaus, and dressers, instead of other furniture categories.

CSUs are freestanding products intended for clothing storage. CSUs are typically intended as bedroom furniture, but CSUs may be used elsewhere. These products are available in a variety of designs (*e.g.*, vertical or horizontal dressers), sizes (*e.g.*, weights and heights), and materials (*e.g.*, wood, plastic, leather). Drawers and doors are common features of CSUs, which accommodate the storage of clothing or other items. CSUs typically have a flat surface on top. Examples include chests with drawers, bureaus, dressers, armoires, wardrobes, portable closets, and clothing storage lockers. CSUs do not include products that are permanently attached to or built into a structure. Additionally, products that are not primarily designed to store clothing, such as bookcases, shelves, cabinets, entertainment furniture, office furniture, or jewelry armoires, are not considered CSUs.

Additional factors may be considered when developing a definition of "CSUs," should the Commission decide to proceed with rulemaking. For example, the existing voluntary standard, discussed below, applies only to CSUs taller than 30 inches. However, based on staff's analysis, it might be appropriate to consider products that are less than 30 inches tall.

The market for CSUs, including prices, product lifespan, and sales, are also discussed below.

#### B. *Incident Data*

The Commission is aware of fatal and nonfatal incidents involving CSU tip overs and consumers of various ages. However, the incident data indicate that the vast majority of fatal and nonfatal incidents involve children, particularly children younger than 6 years old. Accordingly,

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<sup>2</sup> Suchy, Adam, "Product Instability or Tip-Over Injuries and Fatalities Associated with Televisions, Furniture, and Appliances: 2017 Report" September 2017, U.S. Consumer Product Safety Commission, available at: [https://www.cpsc.gov/s3fs-public/Product-Instability-or-Tip-Over-Report-Oct-2017\\_STAMPED.pdf?6zpgEccRRIWpm51koPCsRk8R2jsBp0Kd](https://www.cpsc.gov/s3fs-public/Product-Instability-or-Tip-Over-Report-Oct-2017_STAMPED.pdf?6zpgEccRRIWpm51koPCsRk8R2jsBp0Kd).

staff's analysis focuses on injuries and fatalities to children. Televisions falling from CSUs are discussed briefly here because that scenario appears in the incident data. However, because the relevance of televisions to CSU tip over incidents has not been fully evaluated, staff is not prepared to make any recommendation related to the hazards associated with televisions falling from CSUs.

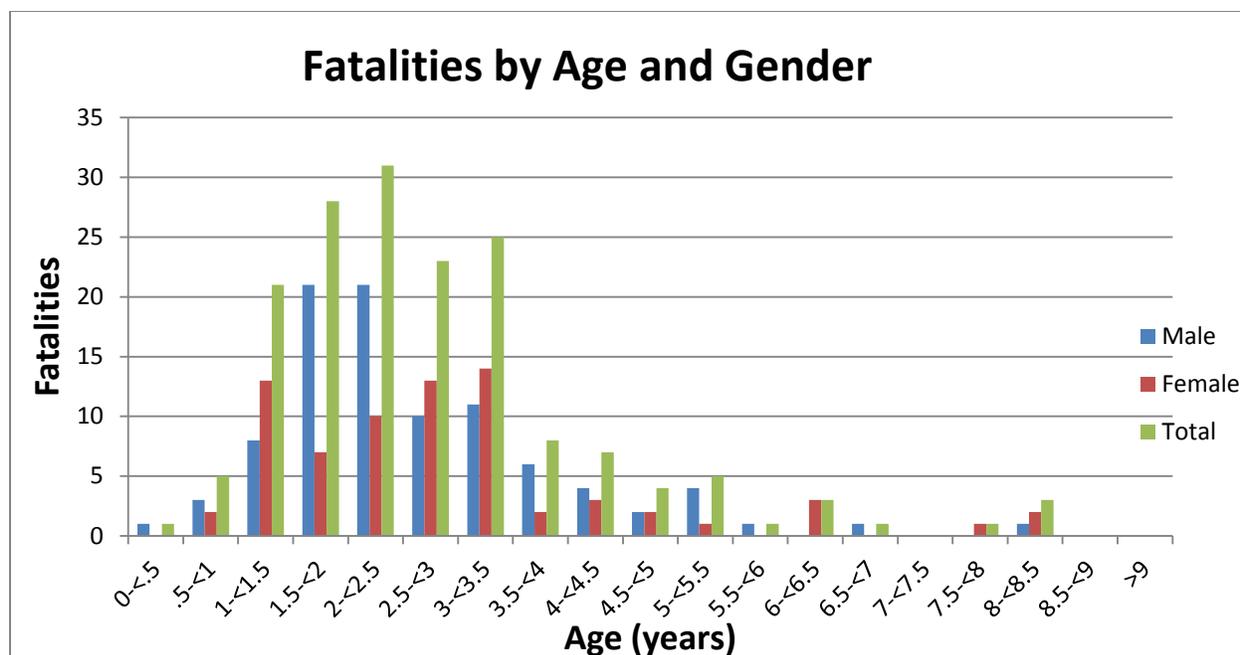
### *1. Fatalities (Tab A)*

CPSC staff's review of DTHS, INDP, IPII and NEISS<sup>3</sup> databases revealed a total of 195 fatalities related to CSUs tipping over that were reported to have occurred from January 2000 through December 2016. Of those fatalities, 167 (86%) involved children under 18 years old. Although the data extracted include children under 18 years old, the oldest fatality is an 8-year-old child. Of the 167 reported child fatalities, 142 (85%) were children under 4 years old, and 159 (95%) were children under age 6 (Figure 1).

All but three child fatalities involved a chest, bureau or dresser, and the remaining three fatalities involved two wardrobes and one armoire. Of the 167 child fatalities, 89 (53%) also involved a television falling.

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<sup>3</sup> These databases are: Death Certificates (DTHS), In-Depth Investigations (INDP), Injury or Potential Injury Incidents (IPII), and the National Electronic Injury Surveillance System (NEISS).



**Figure 1. CSU Instability or Tip Over Child (Under 18) Fatalities Reported by Age (in years) and Gender January 1, 2000 - December 31, 2016**

*Source:* DTHS, INDP, IPII and NEISS databases,

Reporting is ongoing for these databases, and the reported number of incidents may change in the future.

## 2. Injury Estimates (Tab A)

For the years 2006 to 2016, the NEISS data suggest an estimated 65,200 total injuries related to CSU instability or tip over incidents that were treated in U.S. hospital emergency departments, of which 47,700 injuries were to children under 18 years old. Ninety-four percent of injuries to children were age 8 years old and younger, and 83 percent were under age 6. More than half (24,500; 51%) of the estimated emergency department visits by children involved a child aged 2 or 3.

Ninety-nine percent of incidents involved a chest, bureau, or dresser, with the remaining 1 percent including armoires, a “portable closet,” a wardrobe, and an incident that was either an armoire or a dresser. Of the injuries, about 30 percent involved a television also falling with the CSU. Injuries also involving televisions were more likely to result in head injuries. There were two NEISS-reported fatal incidents that also involved televisions, where the victim died after arriving at the ER; these two fatalities are included both in the 167 fatalities discussed in the section above and the NEISS injury estimates.

3. *Reported Incidents*  
 a. *Reported Incident Data*

The data set in Tab F includes incident reports entered into CPSC's IPII, INDP, and NEISS databases no later than January 15, 2016. There were a total of 369 nonfatal incidents related to furniture tip over incidents reported to CPSC that reportedly occurred from January 1, 2005 through December 31, 2015. Sixteen (4%) of the reported nonfatal incidents involved adults (age 18 or older), or the age was unknown. As shown in Table 1, of the remaining 353 incidents, 88 percent involved children under age 6. Because reporting is ongoing, the number of reported nonfatal injuries, and non-injury incidents may change in the future. This dataset should not be used to draw statistical conclusions. Nevertheless, the data set contained incidents reported to CPSC that are very useful for determining reported hazard patterns.

**Table 1. Child CSU-Related Reported Incidents, 2005-2015.**

<b>Age Group</b>	<b>Total</b>	<b>Cumulative %</b>
0-< 0.5	0	0.0%
0.5-<1	1	0.3%
1-<1.5	9	2.8%
1.5-<2	23	9.3%
2	103	38.5%
3	94	65.2%
4	63	83.0%
5	19	88.4%
6	17	93.2%
7	10	96.0%
8	8	98.3%
9	2	98.9%
10	1	99.2%
11	2	99.7%
17	1	100.0%
<b>Total</b>	<b>353</b>	<b>100.0%</b>

### *b. Hazard Patterns*

Staff reviewed the 369 nonfatal CSU incidents that occurred between January 1, 2005 and December 31, 2015, which were reported to CPSC (Tab F), to identify hazard patterns involved in CSU tip over incidents. The reported incidents demonstrate the hazard patterns that are associated with CSU tip overs. As noted, this data set has not been updated to include the most recent incident reports received by CPSC, and thus, it should not be used to draw statistical conclusions. However, this data set is useful to consider because it demonstrates the hazard patterns related to CSU tip overs.

#### Televisions

Placing televisions, especially older, front-heavy, cathode-ray tube (CRT) televisions on top of CSUs has been associated with furniture instability for years. As stated, of the 167 child fatalities, 89 (53%) also involved a television falling, and about 30 percent of NEISS reports for children involved a television also falling with the CSU. Of the 369 nonfatal incidents involving CSUs reported to CPSC (listed in the Tab F data set), 297 (80.5%) involved televisions. Staff notes that during the period of incidents covered in the Tab F data set, a NEISS special study was conducted involving television-related injuries. This means CPSC staff was specifically seeking television incidents for further investigation, while the remaining 72 non-TV-related incidents were generally consumer self-reports. Therefore, the number of television-related incidents reported in the Tab F data set are much higher than would be expected, based on statistically reliable national estimates from the NEISS system, which suggests that only about 30 percent of CSU-related injuries also involve a TV.

This briefing package does not focus on addressing the tip over hazards associated with televisions. In the majority of tip over incidents involving a television atop a CSU, the television was a CRT television, which has most of their weight in the screen portion facing front. The CRT-style of television is no longer manufactured. Because a mandatory standard about television tip overs would apply to TVs that are manufactured after any rule is issued, a standard would be ineffective at addressing the risk of injury posed by CRT televisions. Focusing on the CSU tip over hazard will address incidents involving only CSUs, but the standard may also address incidents involving televisions placed on CSUs, by serving to stabilize the surface on which the television rests. Accordingly, staff recommends that rulemaking address the tip over hazards associated with CSUs. The Commission may decide in the future to address televisions on top of CSUs. Two main hazard patterns are evident in the non-television-related reported incidents, and those hazard patterns are discussed below.

### Opening multiple CSU drawers

In 50 (69.4%) of the 72 reported incidents in Tab F that involved a CSU without a TV, the CSU tipped over when more than one drawer was opened.

### Children Climbing on CSUs

A large percentage of CSU tip overs are related to children climbing on furniture.<sup>4</sup> In addition, the incident data suggest that children may climb onto and into CSUs with a specific purpose, or for play (*e.g.*, Nesteruk, 2016; Lee and Lee, 2017). Examples of purpose-based behaviors found in the data include: standing on a lower drawer to extend reach, or to see into upper drawers; climbing to reach or interact with an object on top of the dresser; using the dresser to pull to a standing position; and opening drawers to remove clothing. Examples of play behaviors seen in the data include: hide-and-go-seek, climbing the dresser for challenge or to jump, and sitting in lower drawers for fun. Eight (11%) of the 72 reported incidents in Tab F involved a child climbing a CSU without a TV.

### Other/unknown hazards

Fourteen (19.4%) of the 72 reported incidents in Tab F were attributed to other or unknown causes of CSU tip overs.

#### *4. Additional Human Factors Analysis*

Engineering Science staff's review of fatal incident data (Tab B) concluded that it is foreseeable and developmentally normal for children under 6 years of age to interact with CSUs to dress themselves, place and remove items on top of CSUs, and exercise developing problem-solving skills by stepping on lower drawers to reach items in upper drawers and on top of a dresser. In addition, although CSUs are not intended to support climbing, sitting, or hiding, staff's opinion is that it is also typical developmental behavior for children to use furniture for these play behaviors. Staff also identified incident reports where CSUs were placed on carpet, which may have contributed to instability, and reports where consumers reported that clothing or other items were in the CSU drawers when the unit tipped.

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<sup>4</sup> Suchy, Adam, "Product Instability or Tip-Over Injuries and Fatalities Associated with Televisions, Furniture, and Appliances: 2017 Report" September 2017, U.S. Consumer Product Safety Commission.

### *C. Severity and Consequences of Injuries (Tab C)*

The Directorate for Health Sciences (HS) provided a review of incidents to identify the mechanism of injury or death associated with CSU tip overs. That review focused on children because a majority of the fatalities were children younger than 6 years. The type of injuries that a child can suffer from a CSU tip over can range from scratches, cuts, bruises, and fractures to potentially fatal injuries resulting from closed-head injuries, internal organ injury, spinal injury, and asphyxia. Given the mass of the CSU, the severity of injury is primarily determined by the point of impact for fractures, internal organ injury, and spinal injuries. A combination of the magnitude and duration of the static and dynamic forces affect the severity of the outcome. For example, a child entrapped under a heavy object can suffer death from asphyxia within a short period of time. Blunt head trauma can result in immediate death or loss of consciousness and prevent a call for help or self-rescue. In addition, pressure on the neck by a component of the CSU can result in rapid strangulation-type asphyxia due to complete occlusion of the airway. Reduced oxygen availability can cause permanent organ and tissue injury, and the brain is particularly sensitive to oxygen deprivation.

Incident reports that staff reviewed involved impact-related deaths from head injuries, skull fractures, brain hemorrhages from blunt head trauma, crushing injuries, and deep scalp hemorrhages. Other deaths were attributed to chest compression resulting from the victim being pinned under the CSU. Nonfatal injuries were reported as head and/or face injuries. They included serious closed-head injuries, skull fractures, and facial lacerations.

HS staff considers that there is a higher risk of a fatal outcome to children, compared to adults, from injuries resulting from CSU tip-overs. This is due to the sheer mass of the CSU and its contents, and the inability of a young, unattended child to self-rescue. Near-immediate rescue is vital for survival and to reduce the likelihood of severe neurological effects because many serious injuries and deaths involving CSU tip overs occur in bedrooms, where children are left unattended for prolonged periods. Some injuries, such as head injuries, can be fatal, even in cases of rapid intervention.

In staff's opinion, many incidents reporting injuries from CSU tip-overs had the potential to result in a fatal outcome, due to the weight of the CSU and its contents, and the inability of a young unattended child to self-rescue. There were multiple fatal incidents where the victim died despite medical care. Additionally, severe head injuries, such as concussions and fractured skulls, as shown in the data, could cause extensive brain damage and affect a child's motor and emotional development, speech, cognitive ability, and overall quality of life, long after the incident.

#### ***D. Market Information (Tab E)***

The retail prices of CSUs vary substantially. The least expensive units retail for less than \$100 and are usually mass-produced, while some more expensive units, often handmade, may retail for several thousand dollars. Virtually all CSUs remain in use for more than 1 year. The less expensive units may be in use for only a few years, while the most expensive units may remain in use for decades and may even be passed from one generation to the next.

The share of the overall furniture market that is made up of CSUs cannot be estimated, due to the lack of public data or market research reports containing information on sales by product type or model. However, based on data from the U.S. Census Bureau, there are about 22,600 firms in the United States involved in household furniture manufacturing, importation, distribution, and retail sale. These firms are involved in the manufacture, distribution, importation, and sale of a variety of furniture products, including, but not limited to, beds, sofas, desks, chairs, stands, tables, and other CSUs. Furniture can be purchased through various distribution channels. Firms that manufacture, import, distribute and sell CSUs account for a subset of the total 22,582 firms; but, staff does not know the proportion, without additional information.

#### ***E. Existing Standards (Tabs A & C)***

##### *1. Voluntary and International Standards*

##### Products covered

The range of products considered to be CSUs in each of the existing standards varies. ASTM limits the scope of CSUs to include chests, door chests, armoires, and dressers over 30 in. (762 mm) in height in ASTM F2057. The European standard, EN-14749, applies to all types of kitchen, bathroom, and domestic storage units with both movable and non-moveable parts. The Australian/New Zealand standard, AS/NZS 4935, applies to domestic freestanding chests, drawers, wardrobes over 500 mm (19.7 in.), and bookshelves/bookcases over 600 mm (23.6 in.) in height. Finally, the scope of ISO 7171 defines “CSUs” as freestanding storage furniture, including cupboards, cabinets and bookshelves that are fully assembled and ready for use while excluding wall-mounted or otherwise built in units.

##### U.S. Based Standards (ASTM F2057 and F3096)

The voluntary standard for CSUs was first approved and published in 2000, as ASTM F2057-00, *Standard Consumer Safety Specification for Chests, Door Chests and Dressers*. ASTM has revised the voluntary standard six times since then. The current version, ASTM F2057-17, *Standard Consumer Safety Specification for Clothing Storage Units*, was approved on

October 1, 2017, and published by ASTM in late October 2017, with the only changes to the 2014 version being the addition of a pictogram to the warning label, performance requirements and corresponding tests for label permanence, and a revised preamble. The bulk of the analysis in this briefing package was based on ASTM F2057-14, which was approved on October 1, 2014, published in October 2014, and remains in F2057-17. In addition, staff has reviewed F2057-17 and assessed all recent changes.

The scope section of ASTM F2057 states that the standard is “intended to reduce injuries and deaths of children from hazards associated with tip over of free-standing clothing storage units, such as chests, door chests and dressers, over 30 in. (762 mm) in height.” The target population for injury reduction, stated in section 1.3 of ASTM F2057-17, is “children up to and including age five.” F2057-17 has two performance tests for the stability of the CSU, requirements for a warning label, and requires CSUs to include a tip over restraint device (TRD) that must conform to ASTM F3096-14. ASTM F3096-14, *Standard Performance Specification for Tipover Restraint(s) Used with Clothing Storage Unit(s)*, is intended to supplement F2057 and assesses the strength of the TRD only, and does not address the in situ performance of the TRD. As detailed below, staff believes that ASTM F2057-17 does not adequately address the tip-over hazard.

### International Standards

Staff identified three international standards for furniture stability:

1. AS/NZA 4935:2009 Australia/New Zealand Standard, Domestic furniture— Freestanding chests of drawers, wardrobes and bookshelves/bookcases— Determination of stability
2. ISO 7171:1988 International Organization for Standardization, Furniture – Storage units – Determination of stability
3. EN 14749:2016 European Standard, Domestic and kitchen storage units and worktops – Safety requirements and test methods

Table 2 provides a comparison of the key performance requirements of each standard.

**Table 2. Key Performance Requirements for Voluntary and International Standards**

	Test Mass	Furniture Height*	Element Breakage	Element Extension	Tip Restraints	Warning Labels	Loaded Drawer Test
F2057-17	50 lbs	30 inches	Repair if possible	To outstop or 2/3	Required	Required	None
AS/NZA 4935	29 kg (63.88 lbs)	500 mm (19.7 in)	Fail	2/3 extension	Strongly recommended	Required	None
ISO 7171	Not specified**	Not specified	Not Specified	2/3 extension	Not mentioned	Not mentioned	None
EN 14749	75 N (16.8 lbs)	Not specified	Not Specified	To outstop or 2/3	Not mentioned	Not mentioned	Yes

\*This is the minimum height of furniture covered in the standard.

\*\* ISO 7171 does not have a pass/fail criterion for its loaded stability test. It simply states: “Apply a vertical force on the part undergoing test and increase the force until at least one of the opposite legs or part of the plinth just lifts away from the floor” then record the force.

## 2. Staff Assessment of Voluntary Standards

As outlined in this section, staff believes that the requirements in ASTM F2057-17 and F3096-14 may not adequately address the hazards associated with CSU tip overs. CPSC staff has been participating on the ASTM F15.42 subcommittee and active task groups before the 2014 revision of F2057 to strengthen its requirements. Staff’s concerns with the ASTM standards include the following areas:

### Scope

Staff believes that the height of CSUs described in the scope section of ASTM F2057-17 may not adequately encompass all CSU-type products that pose a tip-over hazard. This is because the standard does not apply to CSUs that are 30 inches in height or less. Shorter products that are exempt from the standard can pose an unreasonable risk to children these lower height CSUs can weigh up to 100 lbs.

In addition, the age limit in the scope of ASTM F2057-17 may not adequately encompass all of the ages of children at risk of CSU tip overs. Currently, the standard is intended to cover children up to and including age 5, which includes all children who are 5 years old. But CPSC incident data contain fatalities to children as old as 8 years of age.

## Hazard Communication (Tab B)

ESHF staff has identified concerns about provisions of the voluntary standard, including requirements for label location and the hazard communication statements on the warning label. In staff's previous assessment for the 2016 briefing package, staff also had concerns about the label permanence requirements; however, the ASTM 15.42 subcommittee has addressed those shortcomings in F2057-17.

The concern with label location is that the standard does not specify a conspicuous location on CSUs for the warning label. For a warning label to be effective, staff believes it must be in a location that users will see, such as the uppermost clothing storage drawer, or one drawer in the uppermost row that is entirely below 56 inches (so that it can be easily noticed by an adult, parent, or caregiver).

Staff also believes that the provisions concerning hazard communication statements in the standard are not adequate. For example, the standard does not allow for customization of hazard-avoidance statements based on unit design; the warning messages may not reflect the known hazard patterns identified in the incident data; the message panel text is not sufficiently understandable and contradicts typical CSU use (*e.g.*, opening multiple drawers); and the text may not motivate consumers to comply with the warning.

## Performance Requirements (Tab D)

Staff believes that there are several components of the performance requirements in the ASTM standards that are not adequate at reducing the risk of injury associated with CSU tip over incidents. Staff believes that the ASTM standard does not adequately account for operational slide length (OSL), stability testing methods, TRD strength, and age/weight considerations.

In a memorandum dated August 16, 2017, staff updated the Commission<sup>5</sup> with recommendations on improving the test weight specifications, "outstop" performance, testability requirements, and surface definition. Currently, F2057-17 allows test weight tolerances that staff considers imprecise enough to have a potentially adverse effect on the repeatability of stability tests. The inadequate definition of "outstop" (defined as any feature that limits the outward motion of drawers or pullout shelves) refers to how far the drawer is pulled out when performing stability testing. In staff's opinion, the standard's definition should address multiple outstops, have a clear description of the purpose, and specify a minimum OSL (instead of the 66% of OSL

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<sup>5</sup> Andrew Stadnik, "2016 Tipover Briefing Package Test Results Update," to the Commission, August 16, 2017

stated in the standard) to facilitate testing. A testability requirement should be added to address the repair, testing, or result of a sample sustaining damage that impedes or prohibits the full implementation of F2057 performance testing or evaluation. The standard also lacks a detailed definition of a “hard, level, flat surface,” with tolerances.

ASTM F2057-17 includes provisions for testing the stability of CSUs, but requires testing to be performed on “a hard, level, flat surface.” In staff’s opinion, an evaluation of alternate test surfaces that are not perfectly level or flat, such as carpeting, is also necessary to accurately assess the stability of products. When the type of flooring was indicated in incident reports, more commonly, the CSU was on carpeting rather than other surfaces.

The stability testing in ASTM F2057-17 includes two requirements. The first assesses the stability of an empty CSU when all drawers are open. Staff believes that this does not adequately assess the stability of a CSU because tip-over incidents with drawer content information reported indicate that tip-over incidents are more likely to occur when the drawers contain clothing. As such, testing a CSU empty may not adequately assess the stability of a CSU when it is in use. The second test assesses the stability of a loaded CSU. For this loaded test, the standard specifies that 50 lbs of weight should be applied in the specified location. This weight reflects the 95<sup>th</sup> percentile weight of a child on their 5<sup>th</sup> birthday, but the weight of a child past his or her 5<sup>th</sup> birthday, but not yet 6 years old, is greater than 50 pounds (approximately 60 pounds). Incident data suggest that many incidents involve children older than age 5 (although still under 6 years old) applying their weight to a CSU. Therefore, staff’s opinion is that the 50-lb test load in F2057-17 does not accurately address the hazard pattern.

Finally, staff believes that the TRD requirements in ASTM F3096-14 do not adequately assess the strength of TRDs under foreseeable use conditions. Staff believes testing lacks: adaptability to various TRD designs, full assessment of each part of the TRD, simulation of mating materials to which TRDs are likely to be secured, and explicit pass/fail criteria.

#### **IV. REGULATORY AND OTHER ALTERNATIVES**

The Commission could pursue one or more of the following alternatives to reduce the identified risks associated with CSU tip overs:

1. ***Information and education campaign.*** The Commission could continue to promote the use of the existing Anchorit.gov website or education campaign to increase the public’s knowledge of the identified hazard patterns, and means of prevention.
2. ***Voluntary standard.*** The Commission could rely on the existing voluntary standards, ASTM F2057 and ASTM F3096, or continue to work with ASTM to develop more

effective requirements to address the identified hazards, instead of issuing a mandatory rule.

3. **Reliance on recalls.** The Commission has obtained recalls from furniture manufacturers related to the tip-over hazard of CSUs. The Commission could continue to rely on recalls, both voluntary and mandatory, instead of promulgating a mandatory rule.
4. **Mandatory rule.** The Commission could issue a rule under the Consumer Product Safety Act (CPSA) establishing performance requirements and/or warnings and instructions for CSUs to prevent or reduce an unreasonable risk of death or injury associated with tip overs of these products.

## V. DISCUSSION OF ALTERNATIVES

### Information and Education Campaign

The Commission could further promote the use of the existing Anchorit.gov platform to increase the public's awareness and knowledge of the tip over hazard patterns and the use of TRDs. Information regarding the reach and effectiveness of this campaign would be helpful to assess these alternatives. Relying on an information and education campaign alone may not be sufficient to reduce the number of incidents because the message may not reach all consumers, consumers may not pay attention to or heed the information, consumers may not be able to install or may not properly install TRDs, and the campaign relies on consumers to consider the level of risk great enough to install a TRD for each CSU. Currently, it is not clear whether the CPSC AnchorIt! campaign has resulted in any substantial reduction in injuries or deaths to consumers.

### Voluntary Standards

As discussed, there are two U.S. voluntary standards that address CSU tip overs, ASTM F2057-17 and ASTM F3096-14. To issue a final mandatory rule, the Commission would need to find that the voluntary standards do not adequately reduce the risk of injury associated with CSU tip overs or find that there is not substantial compliance with the standards. However, as discussed in this briefing package, staff does not believe that the current voluntary standards are sufficiently effective.

The Commission could also consider directing staff to continue to work with ASTM or begin work with another voluntary standard organization to develop a voluntary standard to reduce the risk of tip over incidents. However, it is not clear that staff recommendations would be adopted by ASTM. In addition, ASTM F2057-17 has a limited scope, addressing only CSUs

above a minimum height and hazards related to children up to age 5. This could result in products that pose an unreasonable risk of injury not being subject to the standards.

### Recalls

The Commission could rely on recalls on a case-by-case basis to address the risk of injury. Staff is concerned that reliance on recalls would be an ineffective approach to ensuring that hazardous CSUs remain out of the market. Recalls cover only products that have already been distributed. To initiate recalls on CSUs, staff has to establish independently that each CSU in question presents a substantial product hazard. In addition, a recall of an individual manufacturer's CSU has no binding effect on other manufacturers that may have similar products that present the same hazard.

### Mandatory Rule for CSUs

The Commission could issue a rule specifying performance requirements, requirements for warning labels and instructions for CSUs, or some combination of these requirements, to reduce the risk of injury associated with these products. As discussed in this briefing package, to address tip-over risks associated with CSUs, staff recommends developing performance requirements for stability and TRDs. In addition, staff recommends communicating hazards through requirements for warning labels.

Although the Commission could pursue a mandatory rule that requires only labeling, staff cautions against relying on warning labels alone. Several factors influence compliance with warnings and instructions, such as consumers' familiarity with the product, how severe they perceive the consequences of the hazard to be, and the conspicuity of the warning. Because personal experience and the recommendations of others, including store displays, placement by a professional delivery service, and previous experience with CSUs is likely to impact the effectiveness of even the most conspicuous and well-understood warning label, staff believes that warning labels alone would have a limited effect at addressing the tip over hazard.

To issue a mandatory standard, the Commission would need to make the findings required by section 9 of the CPSA, including the findings that the rule is reasonably necessary to reduce an unreasonable risk of injury and that the benefits expected from the rule bear a reasonable relationship to its costs. As discussed in the market information section, staff is including questions in the ANPR to collect additional information. Specifically, staff is seeking comments on the issues identified below.

### *Scope and Definition of CSU*

In developing a mandatory standard, CPSC would need to consider whether to limit the scope of a standard to the CSU tip-over hazard posed to children under 6 years of age. Such limitation may be appropriate because the large majority of CSU tip-over injuries and deaths involve children under 6 years old. However, it may also be appropriate not to limit the scope of the standard because there are incidents that impact those over age 6 and some demonstrated hazard patterns (*e.g.*, opening multiple drawers) involve a risk of injury to those older than 6. CPSC also must explore how to define the CSUs that are included in the rulemaking. It may be appropriate to define CSUs by certain characteristics (*e.g.*, minimum product height). These characteristics could reflect the characteristics of products involved in incidents.

### *Stability*

Given the incident data, performance requirements and test methods likely need to include tests to represent tip overs involving a child under 6 years old climbing or standing on a drawer. To represent this hazard pattern accurately, the weight used for testing would need to align with the weight of a child up to age 6, which Centers for Disease Control and Prevention (CDC) values indicate is likely about 60 pounds (95<sup>th</sup> percentile of children just under 6 years old). Additional considerations in a mandatory standard might include:

- Weighting the CSU to represent actual use patterns;
- Dynamic testing to represent a child climbing into or on a CSU; and
- Testing to assess the stability of the product placed on a less-stable surface.

### *Labeling*

Clear and explicit requirements regarding the content and placement of warning labels may assist in reducing the risk of injury associated with CSU tip overs. This may include requirements for permanency of labels, identifying a conspicuous location on CSUs for a warning label, allowing for customization of hazard-avoidance statements based on unit design, comparing warning messages with incident data to make sure that the known hazardous situations are addressed, and including warning content that is easy to understand and consistent with the way consumers typically use CSUs.

### *Tip-Over Restraint Devices (TRDs)*

TRDs are an important factor in reducing the risk of tip over. Performance requirements and test methods that assess the strength of the entire TRD system and account for foreseeable use patterns (including the anchoring materials and operational forces in use) may increase the effectiveness of TRDs to address the tip over hazard.

## **VI. STAFF RECOMMENDATIONS**

Staff recommends that the Commission approve publication of an ANPR in the *Federal Register* that initiates rulemaking and could result in establishing requirements to address the risk of death and injury associated with CSU tip overs. Staff recommends seeking input on ways to address more effectively the following hazard patterns in a potential rule:

- A child under age 6 and weighing up to 60 lbs. climbing on a CSU to play;
- A child under age 6 and weighing up to 60 lbs. standing on a lower drawer to reach into an upper drawer;
- A consumer of any age simultaneously and fully opening multiple drawers that contain items typically stored in a dresser; and
- A CSU placed on a soft surface that simulates average carpet.

The Office of the General Counsel (OGC) prepared a draft ANPR that would commence a rulemaking proceeding under the CPSA for CSU tip overs. The draft ANPR discusses the products, the risk of injury, voluntary standards, and regulatory alternatives to address the risk of injury. The draft ANPR also solicits written comments from interested persons and seeks specific comments on the following:

1. Studies, tests, or surveys performed to analyze furniture tip-over injuries, including severity and costs associated with injury;
2. Studies, tests, or descriptions of technologies or design changes that address tip over injuries and estimates of costs associated with incorporation of the technologies;
3. Information on retail sales or shipments, especially information regarding the type of CSUs sold and number of units sold in recent years;
4. Studies, test, or surveys performed to analyze use of aftermarket products that address tip over hazards (wall straps, anchors, etc.), and their potential effectiveness at reducing tip-overs;
5. Information on the expected impact of technologies or design changes that address tip over injuries on manufacturing costs or wholesale prices;
6. Information on the potential impact of design changes to address CSU stability on consumer utility;

7. Information on the number of CSUs in use;
8. Studies, tests, or surveys performed to analyze the number of televisions and their type (CRT, flat screen), or other large objects placed on top of CSUs and the impact of these objects on the stability of the CSU;
9. Information or studies regarding how characteristics of the flooring surface on which a CSU sits might impact the stability of the CSU and the effectiveness of a stability standard;
10. Information on a suitable definition for a soft surface that could serve as a surrogate for “average” or typical carpet;
11. Information on whether any stability requirement for CSUs in either a voluntary standard or potential mandatory rule could have a disparate impact on small entities, such as small manufacturers or importers;
12. Data on the risk of injury associated with CSU tip overs;
13. The alternatives the Commission is considering;
14. The appropriate scope of a mandatory standard, including the type of products it should address (*e.g.*, all CSUs or only those over a certain height, such as 30 inches; other furniture; televisions) and the ages it should address (*e.g.*, children under 6 years old; children under another age; all ages);
15. Effectiveness of the stability, warning, and TRD requirements being considered;
16. Effectiveness of voluntary or international standards at reducing the risk of injury associated with CSU tip overs; and
17. Information about compliance with ASTM F2057-17 and ASTM F3096-14.

TAB A:

REPORTED CLOTHING STORAGE UNIT TIP OVER-RELATED CHILD DEATHS (2000 –  
2015) AND ESTIMATED EMERGENCY DEPARTMENT VISITS  
BY CHILDREN (2006–2015)



United States  
Consumer Product Safety Commission  
Bethesda, MD 20815

Memorandum

November 15, 2017

**TO:** Michael Taylor, Project Manager, Furniture Tip Over  
Division of Mechanical Engineering, Directorate for Laboratory Sciences

**THROUGH:** Duane Boniface  
Deputy Assistant Executive Director,  
EXHR Acting Director for Epidemiology  
Stephen Hanway  
Division Director, Hazard Analysis,  
EPAH Directorate for Epidemiology

**FROM:** Adam Suchy  
Mathematical Statistician  
Division of Hazard Analysis

**SUBJECT:** Reported Clothing Storage Unit Tip Over-Related Child Deaths (2000 – 2015)  
and Estimated Emergency Department Visits by Children (2006 – 2015)

**INTRODUCTION**

This memorandum characterizes the number of reported deaths from 2000 through 2016,<sup>6</sup> and the estimated emergency department (ED) visits from 2006 through 2016, involving children

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<sup>6</sup> Deaths are from reports entered into CPSC's IPII, INDP, DTHS, and NEISS databases no later than 5/31/2017, corresponding to the Product Instability or Tip-Over Injuries and Fatalities Associated with Televisions, Furniture, and Appliances: 2017 Report.

associated with clothing storage unit (CSU) tip-over incidents.<sup>7</sup> These characterizations are based on reports received by CPSC staff.<sup>8</sup>

Using fatalities and NEISS data from the 2017 Tip Over Report,<sup>9</sup> the following products were considered CSUs: armoires, CBDs (chests, bureaus, or dressers), and wardrobes, as well as products that did not belong to these categories but were meant to store clothes, such as portable closets or clothes storage lockers. Some similar storage products that are not considered CSUs are: cabinets, coat racks, desks, file cabinets, lockers (without specifying it being used as a ‘clothes locker’), safes, shelves, stands, and vanities.

This memorandum focuses on children because the vast majority of injuries and fatalities involving CSUs are to children, as compared to adults or seniors. There was an annual average of 2,600 emergency department-treated injuries to children over the years 2014 to 2016, involving a chest, bureau or dresser with no involvement of a television. In contrast, there was an annual average of 900 emergency department-treated injuries to adults from 2014 to 2016, and there were not enough senior injuries to make an estimate over the same time period.<sup>10</sup> There was an additional annual average of 1,000 emergency department-treated injuries to children over the years 2014 to 2016, involving a television and a chest, bureau, or dresser falling. From 2014 to 2016, there were more clothing storage unit tip-over emergency room visits for children as opposed to adults and seniors.

Table 1 below summarizes the number of CSU fatalities to children, adults and seniors from the 2017 Tip Over Report. Of the 193 fatalities from 2000 through 2016<sup>11</sup> involving CSUs, 165 out of 193 (85%) were children. The miscellaneous fatality that involved a senior was associated with a portable closet. There are two fatalities that resulted in charges of neglect due to lack of supervision of children, which were not included in the annual report or Table 1, but these two are counted among the 167 reported fatalities beginning in the reported fatal incidents section

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<sup>7</sup> Not all of these incidents are addressable by an action the CPSC could take; however, it was not the purpose of this memorandum to evaluate the addressability of the incidents, but rather to quantify the number of fatalities and injuries reported to CPSC staff and to provide estimates of emergency department-treated injuries.

<sup>8</sup> Incident reports submitted to CPSC come from various sources such as hotlines, internet reports, newspaper clippings, medical examiners, death certificates, NEISS (National Electronic Injury Surveillance System) and other state/local authorities.

<sup>9</sup> Suchy, Adam, “Product Instability or Tip-Over Injuries and Fatalities Associated with Televisions, Furniture, and Appliances: 2017 Report” September 2017, U.S. Consumer Product Safety Commission

<sup>10</sup> Suchy, Adam, “Product Instability or Tip-Over Injuries and Fatalities Associated with Televisions, Furniture, and Appliances: 2017 Report” September 2017, U.S. Consumer Product Safety Commission

<sup>11</sup> Fatality counts should be considered incomplete for years 2014-2016, due to a time lapse in reporting to CPSC.

below Table 1. When these 2 neglect cases are included, the proportion of CSU tip over fatalities that were children is 167 out of 195 (86%).

**Table 1: CSU Instability or Tip-Over Fatalities Reported by Year  
January 1, 2000 – December 31, 2016<sup>12</sup>**

	<b>Children (Age 0-17)</b>	<b>Adults (Age 18-59)</b>	<b>Seniors (Age 60 and older)</b>	<b>Total</b>
<b>Chests, Bureaus or Dressers</b>	77	5	19	<b>101</b>
<b>Chests, Bureaus or Dressers + a TV</b>	85	0	0	<b>85</b>
<b>Armoire</b>	0	0	1	<b>1</b>
<b>Armoire + a TV</b>	1	0	0	<b>1</b>
<b>Wardrobe</b>	2	1	1	<b>4</b>
<b>Portable Closet (Miscellaneous)</b>	0	0	1	<b>1</b>
<b>Total</b>	<b>165</b>	<b>6</b>	<b>22</b>	<b>193</b>

*Source: DTHS, INDP, IPII and NEISS databases*

*Reporting is ongoing for these databases and the reported number of incidents may change in the future.*

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<sup>12</sup> There are two fatalities that resulted in charges of neglect due to lack of supervision of children, which were not included in the annual report or Table 1, but these two are counted among the 167 reported fatalities beginning in the reported fatal incidents section below Table 1.

## **REPORTED FATAL INCIDENTS**<sup>13,14,15</sup>

CPSC staff is aware of a total of 167 fatalities to children under 18 years old related to CSUs tipping over that were reported to have occurred from January 1, 2000 through December 31, 2016. The data extracted include children under 18 years old, but the oldest fatality is 8 years old. Of the 167 reported fatalities, 142 (85%) were children under 4 years old, and 159 of the 167 fatalities (95%) were children under 6 years old. All but three fatalities involved a chest, bureau or dresser (CBD), and the remaining three involved two wardrobes and one armoire. Of the 167 fatalities, 89 (53%) also involved a television falling.

In Figure 1, the number of fatalities reported to CPSC by year is presented. During the 2000 through 2016 period, 117 fatalities (70%) were reported since January 2007.

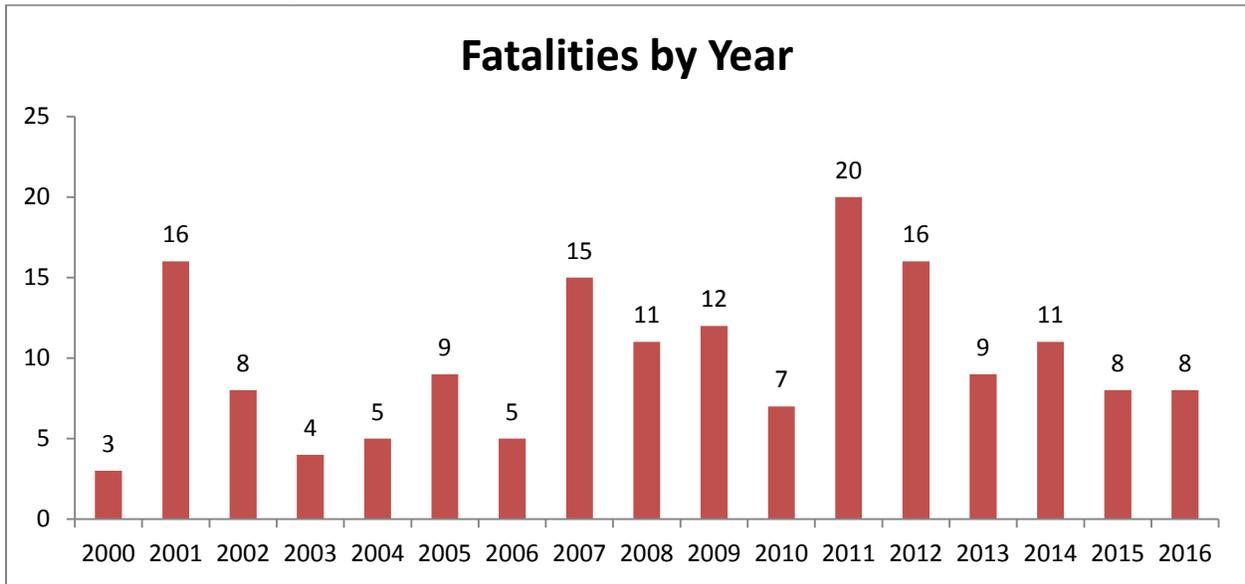
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<sup>13</sup> The CPSC databases searched were the In-Depth Investigation (INDP) file, the Injury or Potential Injury Incident (IPII) file, the Death Certificate (DTHS) file, and the National Electronic Injury Surveillance System (NEISS). The reported deaths and incidents in the counts are neither a complete count of all that occurred during this time period nor a sample of known probability of selection. However, they provide a minimum number of deaths and incidents occurring during this time period and illustrate the circumstances involved in the incidents related to infant bath tubs.

<sup>14</sup> Date of extraction for reported incident data was 06/1/17 corresponding to the Product Instability or Tip Over Injuries and Fatalities Associated with Televisions, Furniture, and Appliances: 2016 Report. All data coded under product codes: 101, 102, 106, 107, 126, 127, 135, 140, 214, 252, 259, 260, 263, 266, 267, 273, 276, 278, 279, 281, 482, 519, 604, 1684, 4013, 4014, 4056, 4057, 264, 572, 693, 1726, 4065, 4067, 280, 557, 709, 1260, 1821, 3233 were extracted and viewed for inclusion. A second search criterion was used to pull data using no product code criteria along with many narrative keywords: tip over, tip over, tipped over, tipped over, fell over, fall over, p and fell, d and fell. Upon careful joint review with CSU Tip Over team members, some cases were considered out-of-scope for the purposes of this memorandum. With the exception of incidents occurring in U.S. military bases, all incidents that occurred outside of the U.S. have been excluded. To prevent any double-counting, when multiple reports of the same incident were identified, they were consolidated and counted as one incident.

<sup>15</sup> Fatality counts should be considered incomplete for years 2014-2016, due to a time lapse in reporting to CPSC.

**Figure 1: Child (Under 18) Fatalities Associated With CSU Instability or Tip Overs Reported by Year January 1, 2000 - December 31, 2016**

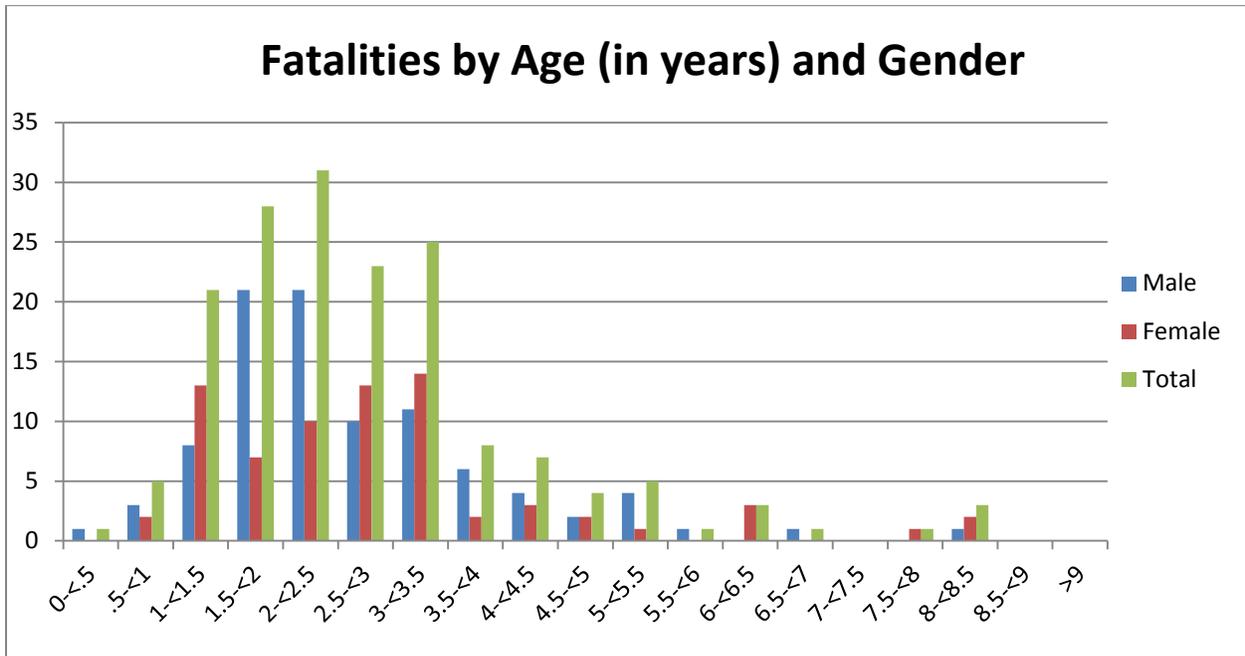


*Source: DTHS, INDP, IPII and NEISS databases,*

*Reporting is ongoing for these databases and the reported number of incidents may change in the future.*

The distribution of the 167 fatalities described above, by age in years and gender, is shown in Figure 2 and in Table 2. Of the 167 children fatalities, 142 (85%) were under the age of 4 years old, and 159 of the 167 fatalities (95%) were children under 6 years old. Of the 167 fatalities, 94 were male (56%) and 73 were female (44%).

**Figure 2: Child (Under 18) Fatalities Associated with CSU Instability or Tip Overs, Reported by Age (in years) and Gender January 1, 2000 - December 31, 2016**



Source: DTHS, INDP, IPII and NEISS databases,

Reporting is ongoing for these databases and the reported number of incidents may change in the future.

Table 2 includes the fatality counts used to produce Figure 1. Additionally, the fatalities are broken down by whether or not a TV fell in addition to the CSU. Among older child fatalities (3.5 years and older), a TV was more frequently involved than not.

**Table 2: Child (Under 18) Fatalities Associated with CSU Instability or Tip Overs, Reported by Age (in years) and Gender and TV Involvement January 1, 2000 - December 31, 2016**

Age (in years)	Male	Female	TV Involved	No TV Involved	Total
0-<.5	1	0	1	0	1
.5-<1	3	2	2	3	5
1-<1.5	8	13	11	10	21
1.5-<2	21	7	11	17	28

<b>2-&lt;2.5</b>	21	10	14	17	31
<b>2.5-&lt;3</b>	10	13	15	8	23
<b>3-&lt;3.5</b>	11	14	9	16	25
<b>3.5-&lt;4</b>	6	2	6	2	8
<b>4-&lt;4.5</b>	4	3	5	2	7
<b>4.5-&lt;5</b>	2	2	4	0	4
<b>5-&lt;5.5</b>	4	1	4	1	5
<b>5.5-&lt;6</b>	1	0	1	0	1
<b>6-&lt;6.5</b>	0	3	3	0	3
<b>6.5-&lt;7</b>	1	0	0	1	1
<b>7-&lt;7.5</b>	0	0	0	0	0
<b>7.5-&lt;8</b>	0	1	0	1	1
<b>8-&lt;8.5</b>	1	2	3	0	3
<b>8.5-&lt;9</b>	0	0	0	0	0
<b>&gt;9</b>	0	0	0	0	0
<b>Total</b>	<b>94</b>	<b>73</b>	<b>89</b>	<b>78</b>	<b>167</b>

Source: DTHS, INDP, IPII and NEISS databases,

Reporting is ongoing for these databases and the reported number of incidents may change in the future.

Shown in Table 3, all but three fatalities involved a chest, bureau or dresser (CBD), and the remaining three involved two wardrobes and one armoire. Of the 167 fatalities, 89 (53%) also involved a television falling. The involvement of a television falling along with a CSU greatly increases the risk of a more serious injury or fatality.

**Table 3: Fatalities of Children (Under 18) Associated With CSU Instability or Tip Overs, Reported by Product  
January 1, 2000 - December 31, 2016**

<b>Product(s) Involved</b>	<b>Reported Fatalities</b>
<b>Television Also Fell</b>	<b>89</b>
<i>TV/CBD (chest, bureau, dresser)</i>	88
<i>TV/Armoire</i>	1

<b>Only Furniture Fell</b>	<b>78</b>
<i>CBD (chest, bureau, dresser)</i>	76
<i>Wardrobe</i>	2
<b>Total</b>	<b>167</b>

Source: DTHS, INDP, IPII and NEISS databases,

*Reporting is ongoing for these databases and the reported number of incidents may change in the future.*

### **NATIONAL INJURY ESTIMATES<sup>16</sup>**

From the NEISS (National Electronic Injury Surveillance System) data, there were an estimated total of 47,700 injuries<sup>17</sup> (4,300 yearly average injuries) (sample size = 1,740, coefficient of variation = .0874) related to CSU instability or tip over incidents for children under 18 years old that were treated in U.S. hospital emergency departments over the 11-year period from January 1, 2006 to December 31, 2016. Ninety-four percent of injuries were to children under 9 years old, and 83 percent were under 6 years old. More than half of the estimated emergency department visits (24,500; 51%) involved a child aged 2 or 3 years old. Ninety-nine percent of incidents involved a CBD; the exceptions included armoires, a “portable closet,” a wardrobe, and an incident that was either an armoire or a dresser. Of the injuries, about 30 percent involved a television also falling with the CSU. Injuries involving televisions were more likely to be head injuries. There were two NEISS incidents involving a fatality, and so these two fatalities are part of the 169 fatalities reported in the fatality counts and also counted as part of the NEISS injury estimates.

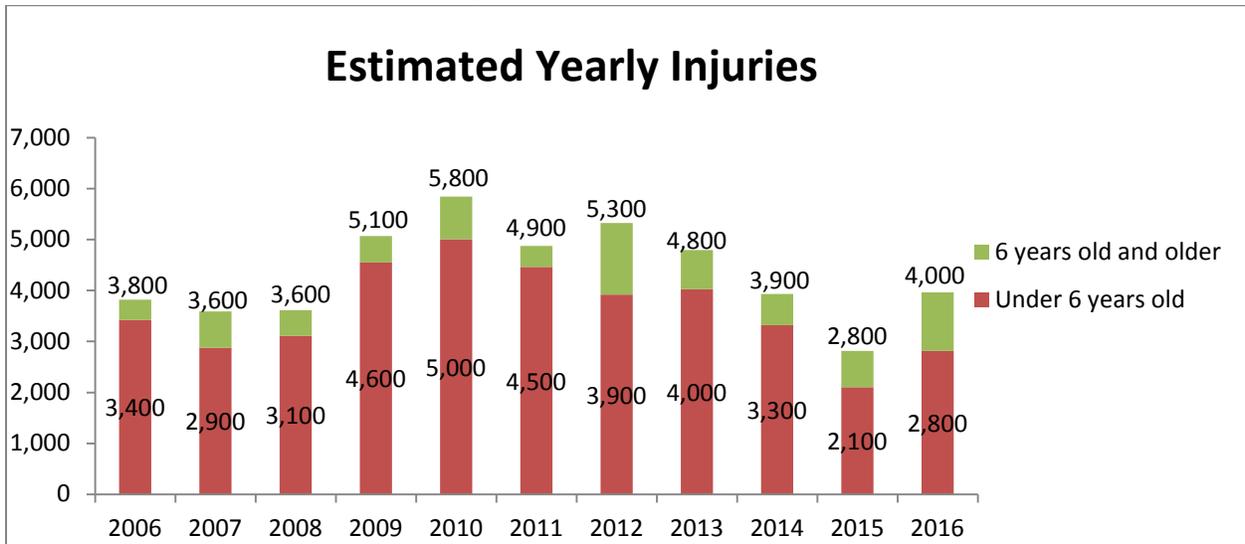
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<sup>16</sup> The source of the injury estimates is the National Electronic Injury Surveillance System (NEISS). NEISS injury data are gathered from emergency departments of hospitals selected as a probability sample of all the U.S. hospitals with emergency departments. The surveillance data gathered from the sample hospitals enable the CPSC staff to make timely national estimates of the number of injuries associated with specific consumer products.

<sup>17</sup> The estimates are rounded to the nearest hundred. Estimates may not sum to total, due to rounding; and asterisks indicate that data were insufficient to support reliable statistical estimates.

Figure 3 shows the NEISS estimated number of CSU tip-over injuries to children, by year, from 2006 through 2016. From 2010 to 2016, there is a significant linear trend in the decreasing number of estimated ED visits by children due to CSU tip-over incidents.<sup>18</sup>

**Figure 3: Estimated CSU Instability or Tip-Over ED Visits by Children (Under 18) by Year**  
**January 1, 2006 - December 31, 2016**



Source: NEISS database

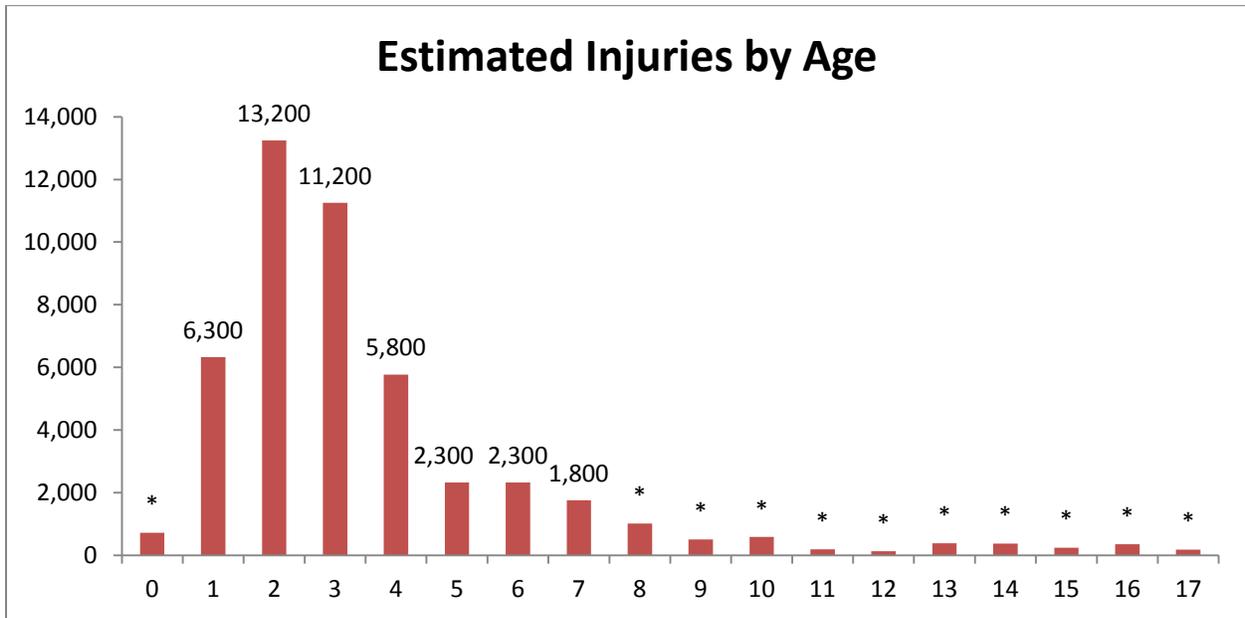
*Estimates are shown for children under 6 years old and for all children under 18 years old.*

*Most estimates for children 8 to 17 years old are too small to meet NEISS publishing criteria.*

Figure 4 shows the NEISS estimated number of CSU tip-over injuries to children, by age, in years from 2006 through 2016. Ninety-four percent of injuries were to children under 9 years old, and 83 percent of CSU tip-over injuries were to children under 6 years old.

<sup>18</sup> The threshold for determining statistical significance is a probability value (p-value) less than 0.05.

**Figure 4: Estimated CSU Instability or Tip-Over ED Visits  
by Children (Under 18) Reported by Year  
January 1, 2006 - December 31, 2016<sup>19</sup>**



Source: NEISS database

\*The number of cases is too small to produce an estimate.

Table 4 shows the breakdown of furniture involved in the CSU tip over injuries. Ninety-nine percent of incidents involved a CBD; the exceptions involved armoires, a wardrobe, and a “portable closet.” Of the injuries, about 30 percent involved a television also falling with the CSU. Injuries also involving televisions were more likely to be head injuries.

**Table 4: Estimated CSU Instability or Tip-Over ED Visits  
by Children (Under 18) Reported by Product  
January 1, 2006 - December 31, 2016**

Product(s) Involved	Estimated Injuries	%
Television Also Fell	14,200	30%
TV/CBD ( <i>chest, bureau, dresser</i> )	14,100	30%

<sup>19</sup> According to the NEISS publication criteria, an estimate must be 1,200 or greater, the sample size must be 20 or greater, and the coefficient of variation must be 33 percent or smaller.

<i>TV/Armoire</i>	*	<1%
<b>Only Furniture Fell</b>	<b>33,500</b>	<b>70%</b>
<i>CBD (chest, bureau, dresser)</i>	<i>33,100</i>	<i>69%</i>
<i>Armoire</i>	*	<i>1%</i>
<i>Armoire or Dresser (unknown which)</i>	*	<1%
<i>Portable Closet</i>	*	<1%
<i>Wardrobe</i>	*	<1%
<b>Total</b>	<b>47,700</b>	<b>100%</b>

Source: NEISS database

\* The number of cases is too small to produce an estimate.

Table 5 shows the types of injuries associated with CSU tip-over ED-visits by children, with a comparison based on whether a television was also involved in the incident. When a television was involved in a CSU tip over, 36 percent of the injuries were internal injuries (which include closed head injuries). Of injuries with no television involved, only 22 percent were internal injuries.

**Table 5: Estimated CSU Instability or Tip-Over ED-Visits by Children (Under 18)  
Reported by Injury Type  
January 1, 2006 - December 31, 2016**

Diagnosis	TV involved Injuries	% of TV involved Injuries	No TV involved Injuries	% of No TV involved Injuries	Estimated Injuries	%
<b>Contusion/Abrasion</b>	4,600	32%	13,100	39%	17,700	37%
<b>Internal Injury (includes closed head injuries)</b>	5,200	36%	7,300	22%	12,500	26%
<b>Laceration</b>	1,200	9%	5,300	16%	6,600	14%
<b>Fracture</b>	1,400	10%	3,000	9%	4,500	9%
<b>All Other Diagnoses</b>	1,800	12%	4,700	14%	6,400	13%
<b>Total</b>	<b>14,200</b>	<b>100%</b>	<b>33,500</b>	<b>100%</b>	<b>47,700</b>	<b>100%</b>

Source: NEISS database

Table 6 shows a breakdown of the body parts affected by the CSU tip-over injuries, with a comparison based on whether a television was also involved in the incident. When a television was involved in a CSU tip over, 58 percent of the injuries were head injuries. Of injuries with no television involved, only 36 percent were head injuries.

**Table 6: Estimated CSU Instability or Tip-Over ED-Visits by Children (Under 18)  
Reported by Body Part  
January 1, 2006 - December 31, 2016**

<b>Body Part</b>	<b>TV involved Injuries</b>	<b>% of TV involved Injuries</b>	<b>No TV involved Injuries</b>	<b>% of No TV involved Injuries</b>	<b>Estimated Injuries</b>	<b>%</b>
<b>Head</b>	8,200	58%	12,000	36%	20,200	42%
<b>Face (including eyelid, eye area and nose)</b>	1,800	13%	5,200	16%	7,100	15%
<b>Trunk</b>	*	5%	3,900	12%	4,700	10%
<b>Foot</b>	*	8%	2,000	6%	3,100	7%
<b>Leg</b>	*	3%	2,100	6%	2,600	5%
<b>Arm</b>	*	2%	*	3%	1,300	3%
<b>Toe</b>	*	1%	*	3%	1,200	3%
<b>Eyeball, Mouth, Neck, and Ear</b>	*	2%	1,300	4%	1,500	3%
<b>All Other Body Parts</b>	*	8%	4,800	14%	5,900	12%
<b>Total</b>	<b>14,200</b>	<b>100%</b>	<b>33,500</b>	<b>100%</b>	<b>47,700</b>	<b>100%</b>

Source: NEISS database

\* The number of cases is too small to produce an estimate.

Table 7 shows a breakdown of the disposition of the injuries resulting from CSU tip overs, with a comparison based on whether a television was also involved in the incident. Seven-percent of

CSU injuries to children involving a television required hospitalization, whereas only 3 percent of incidents with no television involved required hospitalization. There were two fatalities and neither death involved a television.

**Table 7: Estimated CSU Instability or Tip-Over ED-Visits by Children (Under 18)  
Reported by Disposition  
January 1, 2006 - December 31, 2016**

<b>Disposition</b>	<b>TV involved Injuries</b>	<b>% of TV involved Injuries</b>	<b>No TV involved Injuries</b>	<b>% of No TV involved Injuries</b>	<b>Estimated Injuries</b>	<b>%</b>
<b>Treated and Released</b>	12,900	91%	31,200	93%	44,100	92%
<b>Hospitalization</b>	*	7%	*	3%	2,100	4%
<b>Observed</b>	*	1%	*	1%	*	1%
<b>Left</b>	*	2%	*	3%	*	2%
<b>Fatality</b>	*	<1%	*	<1%	*	<1%
<b>Unknown</b>	*	<1%	*	<1%	*	<1%
<b>Total</b>	<b>14,200</b>	<b>100%</b>	<b>33,500</b>	<b>100%</b>	<b>47,700</b>	<b>100%</b>

Source: NEISS database

\* The number of cases is too small to produce an estimate.

### **CONCLUDING REMARKS**

The data demonstrate that both the estimated emergency department visits and the fatalities reported to CPSC vary by age, with a peak at age 2. Televisions are a frequent element present in tip-over injuries and fatalities, with a TV falling over in 30 percent of the estimated emergency-department visits and 53 percent of the reported child fatalities. Head injuries were more common for ED visits when televisions were involved than when they were not. Both the estimated number of injuries and the reported fatalities have declined between 2012 and 2015, with an uptick in 2016 for the injuries. However, fatality reporting is anecdotal and may not reflect the actual changes in child fatalities associated with tip overs. In particular, fatality data after 2013 may not be complete because reports can be received years after an incident has occurred.

TAB B:

HUMAN FACTORS ANALYSIS OF CLOTHING STORAGE UNIT TIPOVER INCIDENTS  
AND HAZARD COMMUNICATION



United States  
Consumer Product Safety Commission  
Bethesda, MD 20815

Memorandum

November 15, 2017

TO: Michael Taylor, Project Manager, Furniture Tipover  
Division of Mechanical Engineering, Directorate for Laboratory Sciences

THROUGH: Joel R. Recht, Ph.D., Associate Executive Director,  
Directorate for Engineering Sciences

Mark Kumagai, Director  
Division of Mechanical and Combustion Engineering, Directorate for Engineering  
Sciences

Rana Balci-Sinha, Ph.D. Director,  
Division of Human Factors, Directorate for Engineering Sciences

FROM: Hope E J. Nesteruk, Children's Program Manager  
Division of Mechanical and Combustion Engineering, Directorate for Engineering  
Sciences

SUBJECT: Human Factors Analysis of Clothing Storage Unit Tipover Incidents and Hazard  
Communication

**INTRODUCTION**

In the fiscal year 2017 Operating Plan, the Commission directed staff to prepare an advance notice of proposed rulemaking (ANPR) to address the furniture tip-over hazard, which includes clothing storage units (CSUs). In this memorandum, staff analyzed fatal and nonfatal tip-over-related incidents and child behavior and anthropometry to identify recommended foreseeable use scenarios and hazards that should be considered in standards development. In addition, staff reviewed the hazard communication requirements in ASTM F2057 – 17 and the warning labels to develop recommendations for addressing tip-over hazards and hazard-avoidance communication.

## **BACKGROUND**

In 2016, staff prepared a briefing package that assessed the voluntary standard for CSUs.<sup>1</sup> In particular, the human factors analyses for that package included anthropometric and child development factors associated with child interaction with CSUs, foreseeable use and misuse patterns associated with CSU-related fatalities, an analysis of warning labels on 61 CSUs, and an analysis of the hazard communication requirements in ASTM F2057 – 14, *Standard Safety Specification for Clothing Storage Units*.

In the 2016 briefing package, ES staff analyzed 159 reported fatalities that occurred between 2000 and 2015 that involved children and CSUs (see Nesteruk, 2016a). Staff found it is foreseeable and developmentally normal for children under 6 years of age to interact with CSUs to dress themselves, place and remove items on top of CSUs, and exercise developing problem-solving skills by stepping on lower drawers in order to reach items in upper drawers and on top of a dresser. In addition, although clothing storage furniture is not intended to support climbing, staff concluded that it is also typical developmental behavior for children to use furniture for play.

## **INCIDENT ANALYSES**

### **Fatal Incidents**

The EPHA memorandum (Tab A) indicates that there were 167 fatal reported incidents involving victims younger than 18 years old that occurred from January 2000 through December 2016. EPHA staff found that 95 percent of these fatal incidents involved victims less than age 6. In addition, 54 percent of the reported incidents involved a CSU, as well as a television (Suchy, 2017a).

In 2016, ES staff reviewed 158<sup>2</sup> of the 167 reported fatal incidents involving CSUs and children (less than 18 years old). One-hundred fifty-one (95%) involved children younger than age 6, with most incidents (62%) involving victims between 2 and 5 years old (Nesteruk, 2016a). Although younger children were included in the data set, the youngest victims who personally interacted with a CSU that tipped were 11 months old (Nesteruk, 2016a). ES staff found a variety of behaviors that contributed to the tip-over incident, including children climbing onto and into dressers for play, and also children climbing with a purpose. Examples of play behaviors seen in the data include: hide-and-go-seek, climbing the dresser for challenge or to jump, and sitting in

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<sup>1</sup> <https://www.cpsc.gov/s3fs-public/Staff%20Briefing%20Package%20on%20Furniture%20Tipover%20-%20September%2030%202016.pdf>

<sup>2</sup> One report in this data set was determined to involve a shelf rather than a clothing storage unit and included by mistake.

lower drawers for fun. Examples of purpose-based behaviors found in the data include: standing on a lower drawer to extend reach or to see into upper drawers, using the dresser to pull to a standing position, scaling a dresser to get into a nearby crib, and opening drawers to remove clothing. In incidents involving a television, staff found behaviors including children scaling a dresser in order to reach televisions, as well as VCRs, DVD players, and video game systems stored with televisions. Many incidents suggested that the child was climbing or standing on a lower drawer in order to reach the controls of a television or to access other items on top of a dresser or in upper drawers. ES staff concluded that it is foreseeable and developmentally expected for children under 6 years of age to interact with clothing storage units to dress themselves, place and remove items on top, and exercise developing problem-solving skills by stepping on lower dresser drawers in order to reach items in upper drawers and on top of a dresser. In addition, although clothing storage furniture is not intended to support climbing, it is also developmentally expected for children to use furniture for play, including climbing.

Of the nine new reports received after the 2016 analysis, no information was found that would change any previous analysis. In-depth investigations (IDIs) were available for eight of the nine incidents. None of the remaining eight fatal IDIs indicated the incident was witnessed. All incidents involved dressers or chests of drawers and half involved a CRT television on the top of the CSU. All victims were less than 5 years old (18 months to 4 years). Where documented (5 of 8 IDIs), victim's weight ranged between 25 and 41 pounds and their height was reported between 31 and 49 inches. In one case, the victim was sent into his room to get dressed and was likely opening the drawers for clothing. For other cases, not enough information was available to determine the preceding event.

### **Injury and Potential Injuries *with* Televisions**

Although televisions are not the focus of the current analysis, many nonfatal incidents involved both a television and a CSU. For the years 2014-2016, there were an annual average of 1,000 emergency department-treated injuries to children involving a chest, bureau or dresser and a television, which is about 30 percent of all CSU-related injuries and 15 percent of all TV-related injuries (Suchy 2017a, Suchy, 2017b). However, of the 369 incidents involving CSUs reported to CPSC that occurred between 1/1/2005 and 12/31/2015 (Tab F), 297 (80.5%) involved televisions. This suggests that television-related CSU tip overs are over-reported in the data set (Tab F). In March 2017, CPSC staff released a report that analyzed reported injuries associated with televisions (TVs) falling off of furniture (Lee and Lee, 2017). Eighty-four percent of victims in the report were less than 5 years old, about 89 percent were less than 6 years old, and about 93 percent were less than 7 years old. The majority of the reported incidents analyzed in this report involved children using the furniture like a ladder or step-stool to reach the TV or other media device (Lee and Lee, 2017). This supports ES staff's review of fatal incidents above.

### **Injury and Potential Injuries *without* Televisions**

For the years 2014-2016, there was an annual average of 2,600 emergency department-treated injuries to children involving a chest, bureau or dresser with no involvement of a television

(Suchy 2017a). Of the 369 nonfatal CSU incidents, 72 incidents did not involve a television. Staff reviewed these incident reports for information about (1) the interaction between the consumer and the tipping furniture, (2) the location of the furniture, (3) the flooring underneath the furniture, and (4) contents of the drawers. Because staff was in search of information related to where consumers place furniture, what they put in the furniture, and how they interact with tipping furniture, the age of the victim or potential victim was not a factor. For example, if a dresser located on a carpet tipped when a drawer was opened, the age of the person opening the drawer is not relevant to the general stability of the unit, as long as the person can physically open the drawers.

About one-third of the reports resulted in an in-depth investigation, while the remaining incidents involved consumer or media reports only. Therefore, much of the data staff sought to obtain was unknown; however, the information that was obtained is summarized below.

### **Consumer Interaction Preceding Incident**

- Fifty reported incidents involved a report of the CSU tipping when one or more drawers were open.
- Eight reported incidents involved a child climbing the CSU. The reported ages of the children were 3 years old (4 reports), 4 years old (2 reports), 5 years old (1 report), and 10 years old (1 report).
- Seven reports did not provide enough information to identify the consumer behavior immediately preceding the incident.
- Two reports involved a CSU that tipped with no consumer interaction.
- The remaining five reports could not be grouped with others. Examples of miscellaneous reports include a consumer moving the dresser, a child pulling on an armoire shelf, or the report of a dresser that “wobbled.”

### **Location and Flooring**

Thirty-three reports included enough information to identify that the location of the CSU was in a bedroom, while the other 39 did not identify the room. Flooring material was also unknown in the majority of reports (52 reports). Of those reports where flooring was reported (including photographic evidence), 14 incidents occurred on carpet, five on wood floors, and one on tile flooring. Of the 14 reports associated with carpeted flooring, only two involved climbing, while the other 12 involved general stability, such as opening a drawer (10 reports), tipping with no consumer interaction, and wobbling. This supports the recent analysis of TVs falling from furniture that reported about three-quarters of reported incidents occurred in rooms with carpet (Lee and Lee, 2017).

### **Drawer Contents**

Twenty-nine reports included information on drawer contents. Three incidents indicated the drawers were empty at the time of the tip, with 2 of the 3 on carpeted floors. In 26

incident reports, clothing was the only thing stored in the drawers. Seven of the clothing-only incidents occurred on carpeted floors, 4 on wood floors, while the remaining incidents occurred on unknown flooring.

## **VOLUNTARY STANDARD**

The ASTM International (ASTM) voluntary standard ASTM F2057-17, *Standard Safety Specification for Clothing Storage Units*, establishes requirements in the United States for freestanding CSUs, such as dressers, chests, and armoires, and the standard is intended to minimize the hazards associated with tip overs. The scope of ASTM F2057-17 states that the standard is intended to address tip-over injuries and deaths to children “up to and including children age five” related to “free-standing clothing storage units, such as chests, door chests and dressers, over 30 in. (762 mm) in height.”

### *1. Child's Age and Weight.*

The intended scope of the standard states: “This safety specification is intended to cover children up to and including age five,” which some subcommittee members contend means children up to “5.0” years (60 months) old and that the load stability test weight, which is 50 pounds, represents the weight of a child “5.0 years old.” However, staff’s interpretation is that “up to and including 5 years old” includes all children that are 5 years old; therefore, test methods in the standard should address a child under age 6: (1) climbing on a CSU to play, and (2) standing on a lower drawer in order to reach into an upper drawer. A test weight of 60 pounds would represent the 95th percentile weight of children past their 5th birthday, but not yet 6 years old, to reflect the ages commonly involved in CSU tip overs.

### *2. Loaded CSUs.*

The voluntary standard requires stability testing for a CSU when multiple drawers are opened simultaneously, but the CSU is empty for this test. The incident data suggest that the test methods should address a consumer of any age simultaneously opening multiple drawers that contain items typically stored in a dresser, such as clothing.

### *3. Conspicuous Label Location.*

The standard requires that a warning label be attached to a CSU in a “conspicuous location when in use,” but does not specify what that means. Placement is critical for users to see and heed warnings, so a placement requirement is necessary for warnings to be effective. For example, if a label were placed in a lower drawer only, a caregiver would need to see a label that is not in their line of sight and then stoop or crouch to read the label, both of which would reduce the likelihood of a label being noticed and read. Therefore, ES staff’s position is that the label should be in a drawer high enough so that an adult parent or caregiver can easily notice and read the label while standing in front of

the open dresser drawer. For many CSUs, this would be the top drawer, but for some taller dressers, the interior of the top drawer may not be readily visible to shorter adults. Therefore, ES staff believes that the warning label should be placed in the uppermost clothing storage drawer or one drawer in the uppermost row that is entirely below 56 inches.<sup>3</sup>

#### 4. *Warning Content.*

ES staff's assessment is that the content of the ASTM warnings may not be effective. For example, the warning in the standard includes a statement warning the consumer not to open more than one drawer at a time, which contradicts typical and foreseeable use (Nesteruk, 2016b). In addition, the manufacturer, rather than the consumer, should determine whether a CSU is suitable for a television, and the warnings should reflect that. Effective warnings should:

1. Allow for customization of hazard-avoidance statements, based on unit design;
2. Reflect incident data to make sure that the known hazardous situations are identified; and
3. Include message panel text that is understandable and does not contradict typical CSU use, and be expressed in a way that motivates consumers to comply.

Since the publication of ES staff's recommendation in the September 2016 briefing package, staff has worked with the ASTM F15.42 voluntary standards subcommittee and associated task groups for warning labels and age/weight to update the voluntary standard based on staff's recommendations. Although some progress has been made in task group work on warning label requirements, of the staff recommendations made in 2016, only label permanence has passed the ASTM balloting process to approval and publication, and is incorporated into F2057 – 17. In addition, F2057-17 includes revised requirements for a pictogram to be included with the label. Staff acknowledges that a well-developed and tested pictogram could increase comprehension. The new pictogram, which includes a child climbing a tipping dresser with a circle-slash overtop, may increase the noticeability and comprehension of the label, although staff is not aware of any testing on this pictogram. However, staff believes that the content issues identified, outweigh increases in comprehension from the new pictograms.

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<sup>3</sup> The 5<sup>th</sup> percentile standing eye height for a barefoot U.S. female age 18 to 64 is 1419mm (55.87 inches) (Open Ergonomics, 2008).

## **SUMMARY**

### ***Hazard patterns***

Incident data continues to support that it is foreseeable and developmentally appropriate for children under 6 years of age to interact with CSUs to dress themselves, place and remove items on top, and exercise developing problem-solving skills by stepping on lower dresser drawers in order to reach items in upper drawers and on top of a dresser. Although clothing storage furniture is not intended to support climbing, it is also foreseeable and developmentally appropriate for children to use CSUs for play. In addition, reported nonfatal incident data suggest opening multiple, loaded drawers of a CSU is associated with tip overs. Recent analysis of flooring associated with reported incidents suggests that carpet may introduce an additional factor that should be considered when testing for the stability of CSUs.

### ***Hazard communication***

ES staff reviewed the warning label requirements in ASTM F2057-14. That review identified a number of areas in which the voluntary standard may not be adequately effective, including label permanence, label location, and the hazard communication statements on the warning label. Since then, the ASTM 15.42 subcommittee has addressed the label permanence requirements, which has been included in F2057-17. However, the subcommittee has yet to incorporate requirements for label location or improvements in the message panel text. Therefore, staff continues to believe that the requirements in ASTM F2057-17 do not adequately communicate the tip-over hazard.

Although staff supports improving hazard communication through a warning label, staff cautions against relying on hazard communications alone. Generally, for a warning to be effective, the consumer must notice, read, and heed a warning. A breakdown in any of these three factors will prevent a warning from being effective. Thus, an effective warning must be carefully written, designed, and placed in ways that will increase the likelihood that consumers will notice, read, and heed the warning. When personal experience conflicts with a warning message, it is generally the warning message that is discredited and ignored (Ayers, Gross, Wood, Horst, Beyer, and Robinson, 1986). Therefore, personal experience and the recommendations of others, including store displays, placement by a professional delivery service, and previous experience with CSUs throughout the person's life are likely to affect the effectiveness of a warning label. Therefore, while staff has provided suggestions for effective warning labels, warning labels alone will have a limited effect addressing the tip-over hazard.

## **REFERENCES**

- Ayers, TJ, Gross, MM, Wood, CT, Horst, DP, Beyer, RR, and Robinson, JN (1984) “What is a Warning and When Will It Work?” *Proceedings of the Human Factors Society’s 33rd Annual Meetings*. 426-430.
- Lee, A. and Lee, A. (2017). *In-Depth Analysis of Nonfatal Injuries from TVs Falling off Furniture*. CPSC: Bethesda, MD. Accessed 4/27/2017: [https://www.cpsc.gov/s3fs-public/NonFatalTVInjuriesreportOctober2016March17\\_0.pdf](https://www.cpsc.gov/s3fs-public/NonFatalTVInjuriesreportOctober2016March17_0.pdf)
- Nesteruk, H. E J. (2016a). *Human Factors Assessment of Furniture Tipover Incidents*. CPSC Memorandum to John Massale, Project Manager, U.S. Consumer Product Safety Commission, Rockville, MD. Available at: <https://www.cpsc.gov/s3fs-public/Staff%20Briefing%20Package%20on%20Furniture%20Tipover%20-%20September%2030%202016.pdf>
- Nesteruk, H. E J. (2016b). *ASTM F2057 – 14 warning labeling requirements: market compliance and voluntary standard evaluation*. CPSC memorandum to John Massale, Project Manager, U.S. Consumer Product Safety Commission, Rockville, MD. Available at: <https://www.cpsc.gov/s3fs-public/Staff%20Briefing%20Package%20on%20Furniture%20Tipover%20-%20September%2030%202016.pdf>
- Suchy, A. (November 15, 2017a). *Reported Clothing Storage Unit Tip Over-Related Child Deaths (2000–2015) and Estimated Emergency Department Visits by Children (2006--2015)*. Memorandum to Michael Taylor, Project Manager, Division of Mechanical Engineering, Directorate for Laboratory Science. U.S. Consumer Product Safety Commission, Rockville, MD. Available in Tab A.
- Suchy, A. (November, 2017b). *Product Instability or Tip-Over Injuries and Fatalities Associated with Televisions, Furniture, and Appliances: 2017 Report*. CPSC: Bethesda, MD.
- Smith, T. P. (September 23, 2016). *Human Factors Staff Estimate of Weight in Support of Furniture Tipover Activities*. Memorandum to John F. Massale, Mechanical Engineer, Division of Mechanical Engineering, Directorate for Laboratory Science. U.S. Consumer Product Safety Commission, Rockville, MD. Available at: <https://www.cpsc.gov/s3fs-public/Staff%20Briefing%20Package%20on%20Furniture%20Tipover%20-%20September%2030%202016.pdf>

TAB C:

HEALTH SCIENCES REVIEW OF THE MECHANISMS AND RISK OF INJURY AND  
DEATH ASSOCIATED WITH CLOTHING STORAGE UNITS TIPOVER



United States  
Consumer Product Safety Commission  
Bethesda, MD 20815

Memorandum

November 15, 2017

**TO:** Michael Taylor, Project Manager, Furniture Tipover  
Division of Mechanical Engineering, Directorate for Laboratory Sciences

**THROUGH:** Alice M. Thaler, D.V.M., M.S. Bioethics, Associate Executive Director  
Directorate for Health Sciences  
Jacqueline Ferrante, Ph.D., Division Director  
Division of Pharmacology and Physiology  
Directorate for Health Sciences

**FROM:** Suad Wanna-Nakamura, Ph.D., Physiologist  
Division of Pharmacology and Physiology  
Directorate for Health Sciences

**SUBJECT:** Staff review of the mechanisms and risk of injury and death associated with Clothing Storage Unit tip over

## **INTRODUCTION**

In the 2017 Operating Plan, the Commission directed staff to prepare an advance notice of proposed rulemaking (ANPR) to address furniture tip-over hazards, which included CSUs (*e.g.*, dressers, chests, and armoires). This memorandum provides Health Sciences (HS) staff's review of the mechanism and types of injury or death associated with CSU tip overs.

## **DISCUSSION**

### **Deaths and Injuries**

#### **Fatal Incidents**

As discussed in the Division of Hazard Analysis memorandum in this briefing package, staff has identified 195 reported fatalities that occurred between January 2000 and December 2016, which involved CSUs, the vast majority of which involved young children.<sup>1</sup> Because the majority of

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<sup>1</sup> Fatality counts should be considered incomplete for years 2014 to 2016, due to a time lapse in reporting to CPSC.

fatalities involved children, and particularly young children, this memorandum focuses primarily on the health impacts for children of CSU tip overs.

Of these 195 reported fatalities, 167 involved children. Of the child fatalities associated with CSUs, approximately 53 percent involved a television placed on top of the CSU. The age range of the children involved in fatal incidents was 3 months to 8 years (one incident involved a 3-month-old who died when an older sibling's action triggered the tip over). Based on 89 autopsy reports, the height of the children ranged from 24-47 inches (61.0-119.3 cm), and their weight ranged from 18 to 66 lbs. (8.2-29.9 kg).

HS staff examined the 167 fatal incidents involving children and CSUs that occurred between 2000 and 2016. Of those 167 fatalities, 71 (43%) were due to head injuries, skull fractures, and brain hemorrhage from blunt head trauma, which involved crushing injuries and deep scalp hemorrhage. The remaining 96 deaths (57%) were attributed to chest compression from the child being pinned under the CSU. Of the 167 deaths, 13 died despite medical care. These children were admitted to the hospital, where resuscitation efforts continued, but failed to revive the children. Most were pronounced dead within a few hours, with the longest survival period being 4 days.

#### Nonfatal Incidents and Consumer Complaints

As the Division of Hazard Analysis memorandum in this briefing package reports, there were an estimated 47,700 injuries related to CSU tip overs involving children under 18 years old who were treated in U.S. hospital emergency departments between 2006 and 2016. The vast majority of these incidents involved children under age 6. Of these 47,700 estimated incidents, most resulted in contusions or abrasions (37%) or internal injuries (including closed-head injuries) (26%). The majority of injuries were to the head (42%), face (including eyelid, eye area, and nose) (15%), or trunk (10%). Ninety-two percent of injuries were treated and released, while 4 percent required hospitalization.

Approximately 30 percent of the total estimated incidents involved a television, in addition to a CSU. When a television was involved, internal injuries and head injuries were more common than when no television was involved. (Befeler AR, et. al., 2014; Bernard, et al., 1998 Muñoz AE. 2012)

Staff examined 369 nonfatal incidents, shown in Tab F, involving CSUs that occurred between 2005 and 2015, most involving children under 6 years old. Of the incidents involving children, 56 did not report injuries, 211 were reported as head and/or face injuries, of which 164 were diagnosed with head injuries, and 47 had face-related injuries. Thirty-two required hospitalization, mostly for a 1-day period. However, six patients required extended stays of up to 4 days; one remained in an induced coma for 3 weeks, and one required rehabilitation, with the patient's condition after discharge not known. The injuries reported included serious closed-head

injuries, skull fractures, a broken nose, hearing loss and a deep facial laceration requiring sutures. All but two of the 164 head injuries were due to impact with a television; the remaining two were due to impact with a CSU.

### **Types of Injuries and Health Effects**

The type of injuries that can result from falling furniture can range from scratches and cuts, bruises, joint injuries, and bone fracture of arms, legs, and ribs to potentially fatal injuries resulting from skull fracture, closed-head injuries, internal organ injury, lung collapse, spinal injury, and “mechanical asphyxia.” This type of asphyxia differs from other forms of suffocation caused by airway blockage (Wolfe and Harding, 2011). The asphyxia results from the mechanical forces generated by the sheer mass of an unyielding object, such as a piece of furniture, acting on the thoracic and abdominal area of the body to prevent thorax expansion and interfere physically with coordinated diaphragm and chest muscle movement during breathing. If the mechanical force is sustained for a sufficient period of time, asphyxia and death can follow.

Potential injuries and the risk of fatality are particularly problematic for children. As reported in the literature and demonstrated in CPSC data, most of the fatal injuries sustained from a CSU tipping over onto a child involve children younger than 6 years (Suchy, 2016; DiScala, et al., 2001; Rutkoski, et al., 2011; Platt and Stanley, 2011; Marnewick, et. al., 2011). This is the most vulnerable age group because, while they have the physical ability to climb and jump, they generally lack the cognitive awareness of hazards, lack the skills to react fast enough to avoid falling furniture, and generally are not strong enough to move the heavy furniture off of themselves when trapped underneath. Most tip-over deaths to children happen when a child opens or climbs on a drawer or reaches for an item on top of a CSU (Tab B), causing it to topple over and entrap the body.

The severity of injury depends upon a variety of factors, but the force generated at the point of impact is the primary determinant for fractures, internal organ injury, and spinal injuries. The force is a combination of the weight of the object, and the nature of the two stationary surfaces; in these cases, the latter are the CSU and the floor, which also affect the static and dynamic loads/energies transferred to the affected body part. The severity of the injury is also dependent on the orientation of the body or body part hit or trapped by the object. Different organs and regions of the body have differing degrees of tolerance to physical stress. The most vulnerable areas are the head, chest, neck, and cervical spine. A combination of the magnitude and sustained duration of the applied force can affect the severity of the outcome. If unable to get out from under a heavy object that is hindering breathing, asphyxia can be fatal within a short period of time (minutes) (DiMaio and DiMaio, 2001; Gordon and Shapiro, 1982). An incident involving blunt head trauma can result in immediate death or loss of consciousness, which would prevent a person from calling for help or attempting self-rescue.

Brain hypoxia can cause unconsciousness in less than 3 minutes and may result in permanent brain damage or death. External pressure on the chest that compromises the ability to breathe by restricting respiratory movement can cause hypoxia. In addition, pressure on the neck by a component of the CSU can result in rapid strangulation-type asphyxia due to complete occlusion of the airway. Reduced oxygen availability can cause permanent organ and tissue injury, and the brain is particularly sensitive to oxygen deprivation.

The prognosis for a hypoxic victim depends on the degree of oxygen deprivation, the duration of unconsciousness, and the speed at which cardiovascular resuscitation attempts are initiated, relative to the timing of cardiopulmonary arrest; rapid reversal of the hypoxic state is essential to prevent or limit the development of pulmonary and cerebral edema, which can lead to death. The sooner the CSU (compression force) is removed and resuscitation is initiated, the greater the likelihood that the patient will regain consciousness and recover from his/her injuries.

Again, the likelihood of mitigating the occurrence or severity of injuries is particularly low for children because of their limited ability to self-rescue, the circumstances often surrounding an incident, and their susceptibility to severe injury. For example, these incidents often happen in the bedroom (96%) (Lee and Lee, 2017), where a child has been left alone to sleep, making the likelihood of the parent/caregiver becoming aware of the accident and rescuing the child low. Children who survive may have neurological sequelae, ranging from loss of memory to a long-term or permanent vegetative state and may require prolonged treatment. Continued deterioration of the nervous system can result in death.

## **CONCLUSION**

Injuries resulting from CSU tip-overs can be severe and have the potential to result in a fatal outcome for children, in particular, due to the sheer mass of the CSU and its contents and the inability of a young unattended child to self-rescue. Sustained application of a force on the chest can physically compromise breathing, leading to compressional asphyxia and death. Sustained pressure on the neck can lead to asphyxia by strangulation. Near-immediate rescue is vital for a good outcome. Such rescue may not occur because many high-severity injuries and deaths involving furniture tip overs occur in bedrooms where children are left unattended. Head injuries can be fatal, even in cases of rapid intervention. Severe head injuries, such as concussions and fractured skulls, could cause extensive brain damage. Such injuries can be particularly devastating for children because they can affect a child's motor and emotional development, speech, cognitive ability, and overall quality of life long after the incident.

## REFERENCES

1. Befeler AR, Daniels DJ, Helms SA, Klimo P Jr, Boop F (2014). Head injuries following television-related accidents in the pediatric population. *J Neurosurg Pe.*
2. Bernard, PA, Johnston C, Curtis SE and King WD (1998). Topped Television Sets Cause Significant Pediatric Morbidity and Mortality. *Pediatrics* Vol. 102 No. 3 September 1998diatr. Oct; 14(4):414-7.
3. DiMaio VJ, DiMaio D. (2001). Asphyxia. In: Geberth VJ, series editor. *Forensic pathology*, 2nd edn. Boca Raton, FL: CRC Press, p .229–77.
4. DiScala, C, Barthel, M., Sege R. (2001). Outcomes From Television Sets Toppling Onto Toddlers *Arch Pediatr Adolesc Med.* 155(2):145-148. doi:10.1001/archpedi.155.2.145.
5. Gordon I, Shapiro HA. (1982). Deaths usually initiated by hypoxic hypoxia or anoxic anoxia. In: Gordon I, Shapiro HA, editors. *Forensic medicine: 2nded.* Edinburgh, UK: Churchill Livingstone; 95–129.
6. Lee, A. and Lee, A. (2017). *In-Depth Analysis of Nonfatal Injuries from TVs Falling off Furniture.* CPSC: Bethesda, MD. Accessed 4/27/2017: [https://www.cpsc.gov/s3fs-public/NonFatalTVInjuriesreportOctober2016March17\\_0.pdf](https://www.cpsc.gov/s3fs-public/NonFatalTVInjuriesreportOctober2016March17_0.pdf) [Last accessed May, 2017]
7. Marnewick J, Dansey R, Morreau P, Hamill J. (2011). Television tip-overs: the Starship Children's Hospital experience and literature review. *Injury.* May; 42(5):534-8.
8. Muñoz AE. (2012). Craniofacial injuries from television tip-over. *Pediatr Emerg Care.* 2012 Jan; 28(1):52-54.
9. Platt MS1, Stanley C. (2011).TV tip-over morbidity and mortality in children. *J Forensic Sci.* Sep; 56(5):1364-7.
10. Rutkoski JD, Sippey M, Gaines BA. (2011). Traumatic television tip-overs in the pediatric patient population. *J Surg Res.* Apr; 166(2):199-204.
11. Suchy A. (2016). Product Instability of Televisions, Furniture, and Appliances: Estimated Injuries and Reported Fatalities. 2016 Report, Bethesda, MD: US Consumer Product Safety Commission. <https://www.cpsc.gov/PageFiles/171154/InstabilityorTipoverReport2014Stamped.pdf> [Last accessed May, 2017]
12. Suchy, A. (July 20, 2017a). *Reported Clothing Storage Unit Tip Over-Related Child Deaths (2000–2015) and Estimated Emergency Department Visits by Children (2006 - 2015).* Memorandum to Michael Taylor, Project Manager, Division of Mechanical.

Engineering, Directorate for Laboratory Science. U.S. Consumer Product Safety Commission, Rockville, MD. Available in Tab A.

13. Suchy, A. (November, 2017b). *Product Instability or Tip-Over Injuries and Fatalities Associated with Televisions, Furniture, and Appliances: 2017 Report*. CPSC: Bethesda, MD. November 2017, U.S. Consumer Product Safety Commission, available at: [https://www.cpsc.gov/s3fs-public/Product-Instability-or-Tip-Over-Report-Oct-2017\\_STAMPED.pdf?6zpgEccRRIWpm51koPCsRk8R2jsBp0Kd](https://www.cpsc.gov/s3fs-public/Product-Instability-or-Tip-Over-Report-Oct-2017_STAMPED.pdf?6zpgEccRRIWpm51koPCsRk8R2jsBp0Kd).

TAB D:

ANALYSIS OF VOLUNTARY STANDARDS FOR CLOTHING STORAGE UNITS



United States  
Consumer Product Safety Commission  
Bethesda, MD 20815

Memorandum

November 15, 2017

TO: Michael Taylor, Project Manager, Furniture Tipover  
Division of Mechanical Engineering, Directorate for Laboratory Sciences

THROUGH: Andy Stadnik., P.E., Associate Executive Director,  
Laboratory Sciences  
Michael Nelson, Supervisory Mechanical Engineer

FROM: Maxwell Sanborn, Mechanical Engineer  
Division of Mechanical Engineering, Directorate for Laboratory Sciences

SUBJECT: Analysis of Voluntary Standards for Clothing Storage Units

## **INTRODUCTION**

In the 2017 Operating Plan, the Commission directed staff to prepare an advance notice of proposed rulemaking (ANPR) to address furniture tip-over hazards, which includes freestanding clothing storage units (CSU) (*e.g.*, dressers, chests, and armoires).

In response to this direction, LSM staff developed a memorandum that provides a summary and evaluation of the voluntary standards and recommended regulatory requirements. There are two voluntary standards that address clothing storage units—ASTM F2057, *Standard Consumer Safety Specification for Clothing Storage Units*, and ASTM F3096, *Tipover Restraint(s) Used with Clothing Storage Units*.

## **ASTM F2057-17, STANDARD CONSUMER SAFETY SPECIFICATION FOR CLOTHING STORAGE UNITS**

ASTM F2057 was first approved and published in 2000, as ASTM F2057-00, *Standard Consumer Safety Specification for Chests, Door Chests and Dressers*. ASTM has revised the voluntary standard five times since then. The current version, ASTM F2057-17, *Standard Consumer Safety Specification for Clothing Storage Units*, was approved on October 1, 2017, and published in October 2017. ASTM F2057 is the responsibility of ASTM Subcommittee F15.42, Furniture Safety.

CPSC staff participates in all of the subcommittee task groups. CPSC staff has been working with ASTM to improve the standards related to CSUs, but ASTM has not reached consensus on the majority of issues, to date.

## **SUMMARY AND ASSESSMENT OF ASTM F2057-17**

ASTM F2057-17 is intended to reduce injuries and deaths of children from hazards associated with CSU tip overs. It is intended to address children up to and including age 5. The standard covers CSUs, including combination chests, door chests, and dressers over 30 inches in height, that are freestanding. Other furniture, such as dining room furniture, bookcases, and jewelry armoires are not covered by the standard. F2057-17 has performance requirements for the stability of the CSU, requirements for the inclusion of tip-over restraints, and requirements for a warning label.

### **Scope**

The ASTM F2057-17 scope section states that the standard applies to CSUs over 30 inches in height. There have been a small number of incidents involving CSUs that are 30 inches or less in height and LSM staff believes that these CSUs can pose an unreasonable risk to children because these low-height CSUs would more likely be intended for and to be used by small children, and that, while low in height, these CSUs can still weigh over 100 lbs.

### **Stability**

ASTM F2057-17 section 7 sets forth two main stability requirements:

1. An unloaded test in which the empty unit shall not tip over when all doors are opened 90° and drawers are pulled to the outstop or in the absence of such a feature, 2/3 of its operational sliding length.
2. A loaded test in which the empty unit shall not tip over when two 25 lb test weights are applied over each door or the front of each drawer pulled to the outstop or in the absence of such a feature, 2/3 of its operational sliding length, with only one door or drawer open at a time.

EXHR staff has completed testing since the September 2016 briefing package.<sup>24</sup> This testing identified several important issues regarding ASTM F2057-14 related to repeatability and

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<sup>24</sup> Andrew Stadnik, "2016 Tipover Briefing Package Test Results Update," to the Commission, August 16, 2017

reproducibility that are impacted by test weight design and use, the need to consider emerging use of multiple outstops that affect testability, procedural details related to test weight placement, and enhancing pass/fail criteria regarding rear portion lift-off with the unit teetering. These issues are discussed in more detail in the letter referenced at the end of this memo and are summarized as follows:

### **Test Weight Considerations**

The test weight for the fixture specified in F2057-17 permits a tolerance of  $\pm 1$  lb for each of the two test weight blocks and indicates a separation distance between test blocks of 6 inches. Regarding the test fixture, the total weight can range from 48-52 lbs. plus the weight of the fastening hardware and strap. Thus, the test fixture can weigh from slightly above 48 lbs. to slightly above 52 lbs. This results in a test weight variability allowed of nominally 8% between test weights. Staff recommends that the total test fixture allowable weight range have a tighter tolerance with a minimum total weight required, for example, 50-51lbs if a nominal 50lb minimum test weight were specified. A large tolerance range greater than 3-4% for example, with the amount of variability allowed by F2057-17, can result in difficulty with repeatability. This could result in inconsistent pass/fail results between tests on the sample product.

In addition, LSM staff believes that the 50-lb. test load may not be consistent with the age and weight of victims. F2057-17 states that the standard is intended to cover children up to and including age 5. LSM staff interprets this as including a 5-year-old child the day before his or her sixth birthday. Furthermore, staff finds that a significant number of incidents involve children up to 6 years of age (Tab B). The 95th percentile weight of children past their fifth birthday, but not yet six, is 60 lbs. The minimum test weight should reflect this weight.

### **Outstop Considerations**

During testing following the publication of the September 2016 briefing package, staff encountered designs with drawer outstops significantly less than 66 percent of the operational sliding length (OSL). CPSC staff tested a CSU with an outstop less than 20 percent of the OSL, which limits users access to contents of the CSU drawer. In addition, during testing, the location of the outstop at 20 percent OSL prevents proper placement of the test weight on the CSU drawer. Staff believes that the stability test in ASTM F2057-17 may not be an accurate assessment of the tip-over hazard. The drawer should be pulled to the furthest outstop for the performance tests to be accurate. In addition, staff believes that clarifying the definition of the term "outstop" is necessary.

## Detailed Test Method Considerations

Again, during Compliance and standards development testing, CPSC staff identified several issues related to specificity and clarity of the test procedures in ASTM F2057-17. CPSC staff identified the following inadequacies:

- a. The standard does not provide adequate detail about applying the test weight fixture to drawers with center dividers, and/or center knobs/handles. The application of the test weight should include greater detail similar to other standards, such as ASTM F2236-16a, *Standard Safety Specification for Soft Infant and Toddler Carriers*, which uses a static weight application. CPSC staff has observed changes in product stability performance with varying orientation and application of the test fixture to accommodate handles, knobs, and other drawer features that can offset the test weight and shift the center of gravity of the test fixture causing the CSU to tip over.
- b. The standard does not specify a time requirement to apply test weight nor a specific amount of time that the CSU must support the weight without tipping over. CPSC staff notes language in other ASTM standards (F963, F2236, and F2194) that refers to application of weight or force over a specific period to avoid imparting an impulse force on the product.
- c. The test procedure does not address contact of the test weight with the drawer bottom and placement of the test weight when CSU drawers are not deep enough to test with the current fixture. This assessment is based on variable results observed in test weight applications on CSUs with shallow drawers.
- d. The standard does not include actual pictures of test fixture application, which would address several of the issues noted above, where appropriate.
- e. The standard does not address how to handle a failed component that cannot be repaired or how to secure a failed component without affecting test results. The standard also does not consider alternatives, such as a design-to-fail feature, preventing the CSU from tipping over.

The standard does not provide a detailed definition of “hard, level, flat surface” (7.1.1 of the standard) and does not include surface flatness tolerance (*e.g.*,  $\pm 0.1^\circ$ ) over a certain area. The standard also does not specify the type of flooring surface material for testing. For example, a vinyl tile that meets certain specifications, such as the Type IV vinyl tile called out in paragraphs 1.2 and 3.1.4 of Interim Amendment-1(YD), dated November 14, 1979, to the Federal Specification entitled Tile, Floor: Asphalt, Rubber, Vinyl, Vinyl-Asbestos, SS-T-312B, dated October 10, 1974 . Based on the foreseeable use of CSUs on alternative flooring types, such as carpeted floors and floors in a home may not be level or flat, LSM staff believes that it may be inadequate not to assess the stability of CSUs on alternate test surfaces.

## **Tip Restraint Devices**

In 2009, ASTM F2057 included new requirements to address a need for tip restraint devices (TRD). The tip restraint provisions were intended to be additional requirements, separate from the freestanding stability requirements. The provisions did not specify the style or design of the TRDs. The only performance requirement was that the TRD “withstands a pull force of 50 lb.” However, no test protocols accompanied this metric.

In 2014, the TRD requirements were moved into a separate standard, ASTM F3096-14. This updated standard contained a testing protocol. ASTM F2057-14 requires CSUs to include TRDs that comply with ASTM F3096-14.

## **Warning Label Permanence**

In October 2017, ASTM F2057 added a new performance requirement and test method for label permanence. The addition of these requirements harmonizes label permanence with other juvenile furniture products, such as F1427 (Bunk Beds), F1169 (Full-Size Cribs), and F2388 (Changing Tables). These requirements are generally considered adequate, as indicated by their inclusion in several rules promulgated under section 104 of the CPSIA.

## **SUMMARY AND ASSESSMENT OF ASTM F3096-14**

The performance requirements of ASTM F3096-14 are found in Section 4. The standard prescribes a testing protocol for a single, linear pull test using a 50-lb. force on the restraint device and associated hardware. The standard describes the test procedure as follows:

Assemble the TRDs in accordance with the manufacturer’s instructions and secure one end of the TRD to a fixed structure. Then attach a loading device to the opposite side and apply a 50-lb load over 2-15 seconds and maintain for 30 additional seconds. If the fasteners detach from the fixed structure in a way that interferes with testing, reattach.

Staff identified several major limitations with this test method. First, ASTM F3096-14 does not allow for an innovative restraint design because it focuses solely on the strap-style restraint. Furthermore, the voluntary standard does not appropriately examine all parts of the strap-style (*e.g.*, the brackets and fastener). ASTM F3096-14 does not simulate the likely materials with which a tip restraint device is intended to be used. In addition, F3096-14 contains no explicit pass or fail criteria.

## **INTERNATIONAL STANDARDS**

Besides ASTM F2057, there are three other standards for furniture stability:

1. AS/NZA 4935:2009 Australia/New Zealand Standard, Domestic furniture—  
Freestanding chests of drawers, wardrobes and bookshelves/bookcases—  
Determination of stability
2. ISO 7171:1988 International Standards Organization, Furniture – Storage units –  
Determination of stability
3. EN 14749:2016 European Standard, Domestic and kitchen storage units and worktops  
– Safety requirements and test methods

The table below compares the key performance requirements of each standard.

**Table 1. Key Performance Requirements for International Standards**

	<b>Test Mass</b>	<b>Furniture Height*</b>	<b>Element Breakage</b>	<b>Element Extension</b>	<b>Tip Restraints</b>	<b>Warning Labels</b>	<b>Loaded Drawer Test</b>
F2057-17	50 lbs	30 inches	Repair if possible	To outstop or 2/3	Required	Required	None
AS/NZA 4935	29 kg (63.88 lbs)	500 mm (19.7 in)	Fail	2/3 extension	Strongly recommended	Required	None
ISO 7171	Not specified**	Not specified	Not Specified	2/3 extension	Not mentioned	Not mentioned	None
EN 14749	75 N (16.8 lbs)	Not specified	Not Specified	To outstop or 2/3	Not mentioned	Not mentioned	Yes

\*Minimum height of furniture that is included in the scope of the standard.

\*\* ISO 7171 does not have a pass/fail criterion for its loaded stability test. It simply states "Apply a vertical force on the part undergoing test and increase the force until at least one of the opposite legs or part of the plinth just lifts away from the floor" then record the force.

It should be noted that ASTM F2057-17 only covers clothing storage units, while AS/NZA 4935 also covers bookshelves and bookcases. Both ISO 7171 and EN 14749:2016 cover all domestic storage furniture, including kitchen and bath storage units.

ASTM F2057-17 and AS/NZA 4935 are similar in that their performance requirements are limited to stability and warnings (ASTM F2057-14 also has a requirement for tip restraint

devices). In addition to stability and warning requirements, EN 14749 also has strength and durability requirements. ISO 7171 only describes a test method for determining stability.

The stability tests of ASTM F2057-1 and AS/NZA 4935 both require pulling one empty drawer or door out to a specified place and applying a force to the drawer or door front. EN 14749 has a test like this, but it also states that all drawers in a row must be pulled out; however, the force is much lower at only 75 N or 16.9 lbs. This difference in test methods would not affect most of the CSUs staff has tested because most of the units staff tested consist of a single column of drawers. EN 14749 also has two more stability tests that are not in ASTM F2057-17 or AS/NZA 4935. One test requires a vertical force of 750 N or 168.75 lbs. 50 mm from the top edge. This would simulate someone standing on the top surface of a CSU on one foot. It also has a loaded test with a force applied. In this test, all drawers are loaded with a weight, depending on the volume of the drawer. Then, one row of drawers is fully opened and then a specified force (20% of the loaded unit or 300 N, whichever is less) is applied to one drawer.

Although it may appear that EN 14749 is the most stringent, due to its numerous stability tests, those other tests are not as severe as applying a large force (50 lbs. in ASTM F2057-17 or 63.88 lbs. in AS/NZA 4935, or greater) to the front edge of an empty unit.

Although all of these standards have performance requirements for stability, only ASTM F2057-17 has a requirement for tip restraint devices. There are only a handful of reported incidents with a tip restraint device installed. LSM staff believes that the most effective way to prevent CSU tip overs is with inherent resistance to a representative impulse force together with a properly installed restraint device. LSM staff believes that ASTM F2057-17 is the most effective starting point to prevent deaths and injuries from CSU tip overs among standards currently available; however staff's opinion is that ASTM F2057-17 could be improved and the recommended requirements discussed in this memorandum would provide a more effective standard to reduce the risk of CSU tip overs.

## **REFERENCES**

1. Butturini, Massale, Midgett, Snyder (2015). Preliminary Evaluation of Anchoring Furniture and Televisions Without Tools, available at: <https://www.cpsc.gov/s3fs-public/pdfs/Tipover-Prevention-Project-Anchors-without-Tools.pdf>
2. Andrew Stadnik, (2016) Tipover Briefing Package Test Results Update, available at: <https://www.cpsc.gov/es/content/2016-tipover-briefing-package-test-results-update>

TAB E:

CLOTHING STORAGE UNITS: PRELIMINARY DISCUSSION OF MARKET SIZE AND  
ESTIMATE OF SOCIETAL COSTS



United States  
Consumer Product Safety Commission  
Bethesda, MD 20815

## Memorandum

November 15, 2017

**TO:** Michael Taylor, Project Manager, Furniture Tipover  
Division of Mechanical Engineering, Directorate for Laboratory Sciences

**THROUGH:** Gregory B. Rodgers, Ph.D., Associate Executive Director,  
Directorate for Economic Analysis  
Robert Franklin, Senior Staff Coordinator

**FROM:** Mark Bailey, Directorate for Economic Analysis

**SUBJECT:** Clothing Storage Units: Preliminary Discussion of Market and Estimate of Societal Costs

### **BACKGROUND**

In the 2017 Operating Plan, the Commission directed staff to prepare a briefing package to support an advance notice of proposed rulemaking (ANPR) addressing the injuries and deaths associated with furniture tip-overs, which includes clothing storage unit (CSU) tip-overs. The purpose of this report is to provide a brief description of the product, estimate the number of firms involved in the market, discuss the number of CSUs in use, and develop some preliminary estimates of the societal costs of deaths and injuries associated with CSU tip-overs. This report also describes additional information that would be needed to support a regulatory analysis, should the Commission eventually issue a proposed rule.

### **The Product**

CSUs are generally freestanding furniture intended to store clothing typical of bedroom furniture. Common CSUs include dressers, chests of drawers, and armoires. This scope is consistent with ASTM F2057-17, *Standard Safety Specification for Clothing Storage Units*, which is intended to reduce injuries and deaths involving children age 5 years and younger, except, ASTM F2057-17 applies to CSUs products over 30 inches in height. CSUs include products with a large variety of designs, weights, and materials used in production. Some examples of CSU designs and materials are standard horizontal and vertical dressers, gentlemen's chests, and lingerie chests constructed with wood, plastic, or leather. These products typically contain drawers that the consumer can pull open to store clothes or other items inside, and they typically have a flat surface on top for additional storage, which is frequently used for the placement of a television or item display. CSUs are usually placed against a wall in a home,

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and CPSC advises consumers with children in the home to anchor the product to the wall with straps, boards, brackets, or braces.

The retail prices of CSUs vary substantially. The least expensive units retail for less than \$100 and are usually mass produced, while some more expensive units, often handmade, may retail for several thousand dollars. Virtually all CSUs remain in use for more than 1 year. The less expensive units may be in use for only a few years, while the most expensive units may remain in use for decades and may even be passed from one generation to the next. The IRS depreciation tables for furniture assume that the useful life of furniture is 8 years.<sup>25</sup> However, this is most applicable to office furniture and not necessarily applicable to CSUs intended for home use.

## **Market Size**

Manufacturers of CSUs might be classified in the North American Industrial Classification (NAICS) categories 337121 (Upholstered household furniture manufacturing), 337122 (non-upholstered wood household furniture manufacturing), 337124 (metal household furniture manufacturing), or 337125 (household furniture (except wood and metal) manufacturing). According to Census Bureau data, in 2015, there were 3,633 firms classified in these categories. A total of 3,591 of these firms (or 99 percent) are classified as small businesses, according to the U.S. Small Business Administration (SBA) size standards (Small Business Administration, 2016). We note that these categories are broad and include manufacturers of other types of furniture, such as tables, chairs, bed frames, and sofas. It is likely that not all of the firms in these categories manufacture CSUs. Some of the manufacturers of CSUs are large and make use of mass production techniques. Others are smaller and may manufacture their products one at a time or on a custom order basis.

Firms that import furniture would likely be impacted by any rule that the Commission might promulgate regulating CSUs because they would have to ensure that any CSUs that they imported met the requirements. Under the NAICS classification system, importers are classified as either wholesalers or retailers. Furniture wholesalers are classified in NAICS category 42321 (Furniture Merchant Wholesalers). According to the Census Bureau data, in 2015, there were 4,918 firms involved in household furniture importation and distribution. A total of 4,737 of these (or 96 percent) are classified as small businesses because they employ fewer than 100 employees (which is the SBA size standard for NAICS category 42321). Furniture retailers are classified in NAICS category 44211 (Furniture Store). According to the Census Bureau, there were 14,031 furniture retailers in 2015. According to the SBA, retailers are considered to be small if their gross revenue is less than \$20.5 million. Using these criteria, at least 97 percent of

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<sup>25</sup> Based on the average of class life under the general depreciation system and alternate depreciation system (see IRS Publication Number 946).

the furniture retailers are small.<sup>26</sup> Wholesalers and retailers may obtain their products from domestic sources or import them from foreign manufacturers.

The total value of furniture consumption in the United States in 2015 was \$94 billion, of which imports accounted for \$32 billion.<sup>27</sup> However, these figures include all furniture types, including desks, tables, chairs, shelving, in addition to CSUs. The percentage of this total accounted for by CSUs is not known. We request information on both dollar and unit sales of CSUs, if available.

### **Number of CSUs in Use in U.S. Households**

We are unable to provide an estimate of the number of CSUs in households because we have not found any public data or market research reports that provide this information. However, the number of CSUs in use certainly exceeds 100 million. We request information that provides information on the number of CSUs in use, by type, if available.

### **INJURIES AND DEATHS**

Although the scope of a possible rule has not been determined, the children most at risk of being injured from CSU tip overs (as well as the focus of staff analysis) are those under age 6 years. In 2017, staff from CPSC's Directorate for Epidemiology, Division of Hazard Analysis (EPHA), identified 159 CSU-related deaths involving children under age 6 years from 2000 to 2016.<sup>28</sup> This results in an average of 9.35 deaths per year for children younger than age 6. The Directorate for Epidemiology collects and provides information on injuries reported through National Electronic Injury Surveillance System (NEISS), a national probability sample of U.S. hospital emergency departments. Based on information provided by the Directorate for Epidemiology, there was an *estimated annual average* of about 2,717 nonfatal CSU-related injuries involving children under age 6 years who were treated in U.S. hospital emergency departments (ED) during the 3-year time span from 2014 to 2016.<sup>29</sup> Of these, about 30 percent also involved a television.

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<sup>26</sup> The estimate of the percentage of furniture retailers that would be considered small is based on revenue data from the 2012 Economic Census of the United States.

<sup>27</sup> Based on the value of domestic shipments from the U.S. Census Bureau's *Annual Survey of Manufacturers* for 2015 and the values of exports and imports from the International Trade Commission.

<sup>28</sup> According to Health Sciences analysis (Wanna-Nakamura, 2017), just over half of the "deaths involved a television placed on top of the dresser. However, it is not clear from the incident data whether the placement of a heavy television on top of the CSU affected the stability or contributed to the death."

<sup>29</sup> This estimate is a subset of NEISS injury estimates in Suchy (2017a). Children under 6 years old account for 76.7 percent of all nonfatal injuries from 2014 to 2016.

Many product-related injuries are treated in other medical settings, such as, physicians' offices, clinics, and ambulatory surgery centers that are not captured in NEISS data. Injuries can also result in direct hospital admission without involvement of a hospital emergency department. The number of CSU tip-over injuries treated outside of hospital EDs is estimated using CPSC's Injury Cost Model (ICM), which uses empirical relationships between the characteristics of injuries (diagnosis and body part) and victims (age and sex) initially treated in hospital EDs and the characteristics of those initially treated in other settings as the basis for projecting the number of injuries treated outside of emergency departments. (Miller et al., 2000; Bhattacharya et al., 2012; Lawrence, 2013). The ICM estimate for injuries treated outside of hospitals or hospital EDs (*e.g.*, in doctors' offices, clinics) is based on data from the Medical Expenditure Panel Survey (MEPS). The ICM uses the MEPS data, in combination with a classification tree analysis technique, to project the number and characteristics of injuries treated outside of hospitals. To project the number of direct hospital admissions that bypass hospital EDs, the ICM uses data from the Nationwide Inpatient Sample of the Healthcare Cost and Utilization Project (HCUP-NIS), which was also analyzed using a classification tree analysis technique.

Based on ICM estimates, there were another 3,273 medically attended injuries annually involving children under age 6 years who were treated outside of hospital EDs during the 2014 through 2016 period. Consequently, there was an estimated annual average of about 5,990 medically treated injuries involving children under age 6 years (including 2,717 initially treated in hospital EDs plus 3,273 treated outside of hospital EDs) resulting from CSU tip overs during the 2014 to 2016 period.

## **CONCLUSION**

An estimate of the societal costs of the injuries and deaths, in combination with estimates of the number of CSUs in use, the expected product life of CSUs, the proportion of CSUs in use that would already conform to any action taken by the CPSC, and the effectiveness of the action in preventing injuries and deaths, is required to determine the benefits of the action. Some of this information might be obtainable from a consumer exposure survey or a comprehensive study of in-depth investigations of injuries involving CSUs, if other sources of information cannot be found.

## **REQUEST FOR INFORMATION**

For the Commission to issue a final rule addressing CSU tip overs, staff would need to prepare a regulatory analysis. Staff would prepare a preliminary regulatory analysis for a notice of proposed rulemaking. This analysis would include estimates of potential costs and benefits of the standard the Commission is considering and of the alternatives under consideration. To conduct this analysis, CPSC EC staff needs additional information. Therefore, CPSC EC staff requests the following information regarding ways to address the risk of injury associated with CSU tip-over injuries, the market for CSUs, and the relevant costs and potential benefits of a prospective standard addressing the tip-over risk:

1. Studies, tests, or surveys performed to analyze furniture tip-over injuries, including severity and costs associated with injury;
2. Studies, tests, or descriptions of technologies or design changes that address tip-over injuries and estimates of costs associated with incorporation of the technologies and their impact on wholesale or retail prices;
3. Information on the number of CSUs in use, and the average number of years a CSU is in use before being disposed;
4. Information on retail sales or shipments, especially on CSU unit sales by model or other characteristics in recent years;
5. Information on the number of manufacturers and importers of CSUs and other relevant information, such as their size, or the diversification of the firms.
6. Studies, test, or surveys performed to analyze use of aftermarket products that address tip-over hazards (wall straps, anchors), and their effectiveness at reducing tip overs, and the means by which their use by consumers could be increased;
7. Information on the expected impact of technologies or design changes that address tip-over injuries on manufacturing costs or wholesale prices;
8. Information on the potential impact of design changes to address CSU stability on consumer utility;
9. Studies, tests, or surveys performed to analyze the number of televisions along with type (CRT, flat screen) or other large objects placed on top of CSUs and the impact of these objects on the stability of the CSU, or the severity of injuries;
10. Information or studies regarding how characteristics of the flooring surface on which a CSU sits might impact the stability of the CSU, and the effectiveness of a stability standard; and
11. Information on whether a stability requirement for CSUs could have a disparate impact on small entities, such as small manufacturers or importers.

## **REFERENCES**

- ASTM F2057-14, Standard Safety Specification for Clothing Storage Units, ASTM International, West Conshohocken, PA, 2014.
- Bhattachara, S., Lawrence, B., Miller, T.R, Zaloshnja, E., Jones, P.R. (2012). *Ratios for Computing Medically Treated Injury Incidence and Its Standard Error from NEISS Data* (Contract CPSC-D-05-0006, Task Order 8). Calverton, MD: Pacific Institute for Research and Evaluation, (Aug 2012).
- CPSC (2000). *The National Electronic Injury Surveillance System: A tool for researchers*. Bethesda, MD: U.S. Consumer Product Safety Commission.
- Environmental Protection Agency. (2014). Appendix B: Mortality Risk Valuation Estimates, in *Guidelines for Preparing Economic Analysis*. National Center for Environmental Economics, U.S. Environmental Protection Agency: Washington, DC.
- Gold MR, Siegel JE, Russell LB, and Weinstein MC. (1996). *Cost-Effectiveness in Health and Medicine*, New York: Oxford University Press.
- Haddix AC, Teutsch, SM, and Corso PS. (2003). *Prevention Effectiveness: A Guide to Decision Analysis and Economic Evaluation*. New York: Oxford University Press.
- Kids In Danger (KID) and Shane’s Foundation (2016). *Furniture Stability: A review of data and testing results*. Kids in Danger: Chicago, IL. Accessed 5/31/2016:  
[http://www.kidsindanger.org/wp-content/uploads/Furniture\\_Stability\\_Report\\_Final\\_\(1\).pdf](http://www.kidsindanger.org/wp-content/uploads/Furniture_Stability_Report_Final_(1).pdf)
- Lawrence, B. (2008). *Impact of alternative discount rates on injury cost model estimates* (Contract CPSC-D-05-0006, Task Order 7). Calverton, MD: Pacific Institute for Research and Evaluation (November 2008).
- Lawrence, B. (2013). *Revised Incidence Estimates for Non-Fatal, Non-Hospitalized Consumer Product Injuries Treated Outside Emergency Departments* (Contract CPSC-D-89-09-0003, Task Order 2). Calverton, MD: Pacific Institute for Research and Evaluation (April 2013).
- Lawrence, B. (2014). *Updated price indexes for the Injury Cost Model* (Contract CPSC-D-0003, Task Order 3, Subtask 4). Calverton, MD: Pacific Institute for Research and Evaluation (August 2015).
- Lawrence, B. (2015a). *Update medical costs for ED-treated injuries* (Contract CPSC-D-0003, Task Order 3, Subtask 1). Calverton, MD: Pacific Institute for Research and Evaluation (January 2015)

- Lawrence, B. (2015b). *Update medical costs hospital-admitted injuries* (Contract CPSC-D-0003, Task Order 3, Subtask 2). Calverton, MD: Pacific Institute for Research and Evaluation (January 2015)
- Lawrence, B. (2015c). *Updated survival probabilities for the Injury Cost Model* (Contract CPSC-D-0003, Task Order 3, Subtask 3). Calverton, MD: Pacific Institute for Research and Evaluation (August 2015).
- Miller et al., (2000). *The Consumer Product Safety Commission revised injury cost model*. Calverton, MD: Public Services Research Institute. Available at: <https://www.cpsc.gov/s3fs-public/pdfs/Revised-Injury-Cost-Model-120100.pdf>
- Nesteruk, H. E J. (2016). *Human Factors Assessment of Furniture Tipover Incidents*. CPSC memorandum to John Massale, Project Manager, U.S. Consumer Product Safety Commission, Rockville, MD. Available at: <https://www.cpsc.gov/s3fs-public/Staff%20Briefing%20Package%20on%20Furniture%20Tipover%20-%20September%2030%202016.pdf>
- Office of Management and Budget. (2013). *2013 Draft Report to Congress on the Benefits and Costs of Federal Regulations and Agency Compliance with the Unfunded Mandates Reform Act*, Washington, DC.
- Rice, Dorothy P., MacKenzie, Ellen J., and Associates (1989). *Cost of injury in the United States: A report to Congress*. San Francisco, CA: Institute for Health & Aging, University of California and Injury Prevention Center, The Johns Hopkins University.
- Rodgers, Gregory B. (1993). Estimating jury compensation for pain and suffering in product liability cases involving nonfatal personal injury. *Journal of Forensic Economics* 6(3), 251-262.
- Small Business Administration. Table of Small Business Size Standards: 2016. Washington, DC. Available at: <http://www.sba.gov/content/small-business-size-standards>.
- Suchy, A, (2016). Product Instability or Tip-Over Injuries and Fatalities Associated with Televisions, Furniture, and Appliances: 2016 Report, Bethesda, MD: US Consumer Product Safety Commission.
- Suchy, A. (2017a). Product Instability or Tip-Over Injuries and Fatalities Associated with Televisions, Furniture, and Appliances: 2017 Report, Bethesda, MD: US Consumer Product Safety Commission.
- Suchy A. (2017b) Reported Clothing Storage Unit Tip Over-Related Child Deaths (2000 – 2015) and Estimated Emergency Department Visits by Children (2006 - 2015), Bethesda, MD: US Consumer Product Safety Commission.
- Taylor, M. (2016). *Furniture Tipover*, CPSC Memorandum to John Massale, Project Manager, U.S. Consumer Product Safety Commission, Rockville, MD. Available at:

<https://www.cpsc.gov/s3fs-public/Staff%20Briefing%20Package%20on%20Furniture%20Tipover%20-%20September%2030%202016.pdf>.

U.S. Department of Commerce, Bureau of the Census (2017a). *County Business Patterns: 2015*. All United States. Available at: <https://www.census.gov/programs-surveys/cbp.html>

U.S. Department of Commerce, Bureau of the Census (2017b). *American Community Survey: 2015*. Available at: <https://www.census.gov/programs-surveys/acs/>.

U.S. Department of Commerce, Bureau of the Census (2017c). *Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2016*. Available at: <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>

Viscusi, W. K. (1988). The determinants of the disposition of product liability cases: Systematic compensation or capricious awards? *International Review of Law and Economics*, 8, 203-220.

Wanna-Nakamura, S. (2017). Staff Review of the Mechanisms and Risk of Injury and Death associated with Clothing Storage Units Tipover. Memorandum to Michael Taylor, Project Manager, U.S. Consumer Product Safety Commission, Rockville, MD

TAB F:

NONFATAL TIPOVER INCIDENTS JANUARY 2005 – DECEMBER 2015

## Nonfatal Clothing Storage Furniture Tip-Over Incidents

1/1/2005 - 12/31/2015\*

\*Based on reports entered into CPSC's IPII, INDP & NEISS databases no later than 1/15/2016.

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

#	Document #	Date	Age/Sex	City/State	Narrative
1	H0510094A C0530021A	1/1/2005	3 YOM	Princeton, NJ	A woman was assembling new dresser when her 3 year old son attempted to open all six drawers causing the dresser to tip over. No injury. Owner wants a recall.
2	I0570355A	1/1/2005	2 YOM	Palm Bay, FL	A 2 year old male received a scrape on his face after a kids dresser fell on him. Consumer noticed that if you have any two drawers of the four drawers open at one time, the dresser falls down.
3	I0510439A 140917CBB1949	1/18/2005	2 YOF	Ossining, NY	A newly assembled six-drawer dresser, installed in a two-year old's bedroom, tipped over immediately after the adult complainant filled the drawers. It is unknown if any drawers were open at the time of the incident. There were no injuries. The complainant discarded the dresser in the trash on an unknown date after the incident.
4	H0530049A	2/27/2005	6 YOF	Louisville, KY	A 6 year old girl pulled hard on the top drawer of the dresser when it fell over emptying all of the drawers as it fell. No injury. The dresser is made of thick heavy wood & the backing is made of cardboard.
5	I0540319A	4/18/2005	3 YOF	Arkansas City, KS	A 3 year old girl was placing clothes in dresser when it fell, pinning her. The same incident happened again. She received bruises on her cheek & scrapes on her leg & hand. The dresser was part of a bed in a box set.
6	H0570297A	6/1/2005	4 YOF	Irvine, CA	A girl, age 4, while changing her clothes pulled out both the bottom drawers of the dresser when it slightly tipped over, partially pinning her. No injury. The unit should be equipped with a bottom anchor to prevent tip over.

7	I0570379A 050726CNE2655	7/17/2005	5 YOM	King Of Prussia, PA	A 5-year-old male opened the bottom three drawers from a 5 drawer dresser and it immediately fell forward to the floor. Fortunately, the child was standing to the side of the dresser when it fell so he was not injured in the incident.
8	H0610101A	8/1/2005	17 YOM	Souderton, PA	Dresser had suddenly tipped over, hitting the top of a 17 year old male's head. On another occasion, the falling dresser crashed onto a game system.
9	H05A0132A	10/13/2005	3 YOF	Barrington, RI	A 3 year old girl received a bump on top of her head when she opened each drawer of a children's dresser & it tipped over & fell on her.
10	I05C0200A	12/13/2005	2 YOF	Milton, FL	A 2 year old female was injured when she was opening her dresser drawers & the dresser fell over almost on top of her, cutting her head open.
11	N0620261A 060209CWE5140	2/6/2006	16 MOF	Syracuse, UT	A 16-month-old female sustained a skull fracture and an indeterminate amount of brain damage when a five-drawer dresser with a 19" television on top fell on top of her. The victim went into the master bedroom at her mother's request to retrieve a pair of socks from a basket. It is unknown if the victim was attempting to climb or open one of the drawers as her mother was in another room of the house.
12	Mfr/Retailer Rpt 141224CBB3235	2/6/2006	43 YOF	Gilbert, AZ	A 43yof reported that a chest of drawers with four fully extended drawers tipped over as she was putting laundry into the unit. A television set on top of the unit fell and damaged a window frame from the incident. The manufacturer was contacted by the consumer who initially reported an injury however after contacting the consumer by telephone, it was determined the consumer had no injuries resulted from the incident. Damage in the form of a dent to the window frame was the only reported damage.
13	090311HEP9024	2/20/2006	4 YOM	Watauga, TX	Patient is a 4 year old male who was in his bedroom watching tv when he decided to play with his dresser. The dresser drawers were pulled out & as he climbed up them, the dresser & tv fell over. When the mother found him, the end of the dresser was on his forehead & the tv beside him. Patient was taken to the er,

					treated, & released.
14	I0680006A	7/1/2006	30 YO	Unknown	A 4 drawer dresser tips forward when all drawers are open. No injury.
15	H0690020A	8/5/2006	2 YOM	Evergreen Park, IL	2 year old male injured his right hip when dresser fell to the floor face down.
16	I0730288A 070316CNE2107	9/17/2006	51 YOM	Englewood, FL	One leg of a new armoire fell off when a 51-year-old male moved it a couple of inches to plug something in behind it. The leg caused the armoire to become unbalanced and the top part of the armoire fell forward and hit the victim on the shoulder. The victim self-treated his injury at home.
17	I0690324A	9/18/2006	4 YOF	Grand Forks, ND	Chest of drawers falls forward when all the drawers are pulled out at the same time causing minor blunt trauma to 4 year old girl's hand.
18	I0820125A	1/1/2007	2 YOM	Roy, UT	A consumer reports that the 5-drawer chest presents a safety hazard to her 2 year-old son. The t-lock system frequently fails, allowing multiple drawers to open simultaneously. This results in the chest falling forward. No injuries.
19	I0710420A	1/18/2007	4 YOF	Melrose, MA	4 year old girl pulled drawers out from dresser and stood on them to reach tv. The dresser tipped and fell on her legs. The tv fell on her arm. She sustained immediate swelling and bruising in her arm and a fractured hand.
20	H0730086A	3/6/2007	Unknown	Charlotte, NC	Dresser fell over onto consumer when bottom drawer filled with clothing was pulled out all the way. No injury.
21	090427HEP9021	4/6/2007	3 YOM	Phoenix, AZ	The 3 year old male victim was playing at a friend's house. His mother said that she was told he attempted to reach a dvd player sitting on top of the tv by climbing up on the dresser the tv was sitting on. In order to climb up the dresser he pulled out one of the drawers to climb on. When he stepped on the drawer the dresser and tv tipped over and landed on the victim. The parents

					of his friend took him home and his father took him to the hospital. At the er he was treated, diagnosed with a fractured skull, and admitted. He was held overnight and released.
22	I07A0088A	9/30/2007	91 YOF	Kafayette, PA	4 drawer bureau tripped forward when all 4 drawers were open at the same time. No injury.
23	090121HEP9008	1/2/2008	4 YOF	Jonesboro, GA	Patient is a 4 year old female who was in her uncle's bedroom watching tv that sat on a dresser. The patient climbed up the dresser to turn off the tv & the dresser tilted & the tv fell off. The patient hit her head on the tv. Patient was taken to the er, treated, & released.
24	I0820285A	2/8/2008	5 YOM	Mcdonough, GA	A boy, age 5, was trying to get clothes out and the dresser tipped over on him and he was pinned between the dresser and the bed. No injury.
25	H0820153A	2/9/2008	23 MOF	Spring Valley, NY	A consumer reported that her 23 month-old daughter was struck in the chest by a falling dresser after her 6 year-old daughter opened the top three drawers and the unit fell forward. No injuries.
26	I08C0415A	9/13/2008	11 YOM	Yellow Springs, OH	11 year old female opened 2 drawers at the same time to put away her clean clothes & it crashed down upon her. She sustained bruises & cuts but did not sustain more serious injuries.
27	H08C0092A	10/5/2008	46 YOF	Bellevue, WA	A flat screen television was bolted to the hotel's dresser. When a 46 year old female was opening the drawer of the dresser, the television & dresser tipped over on top of her. She began sustaining difficulty thinking & was hospitalized for altered memory & nausea.
28	I08A0345A	10/9/2008	3 YOM	Glen Ellyn, IL	An unstable dresser fell on top of a 3-year-old boy when he opened the drawers. Consumer found that when several of the draweres were opened at the same time, the dresser becomes unstable & falls over.

29	I08B0092A 081105CCC3095	11/2/2008	2 YOM	Phoenix, AZ	A 28-month old boy got up out of his bed and walked over to the west wall of his bedroom. He pulled on the top drawer of his 4-drawer chest. Suddenly, the entire chest fell forward and landed on top of the boy. He suffered a laceration above one eye. The boy was taken to the hospital where he received about 6 stitches.
30	I08C0429A	12/12/2008	2 YOM	San Antonio, TX	2 year old male opened/pulled the 2nd bottom left drawer. The drsrer had tipped over on him. He sustained a small bump to the back of his head & a red mark on his mid back.
31	X1321318A	1/1/2009	3 YOF	Unknown	A 3 yof opened the drawers of a 100-pound wooden dresser & started to climb. The mother heard a crash & found the girl pinned from the neck down under the dresser. She escaped unharmed.
32	X1321318C	1/1/2009	3 YOM	Unknown	A 3 yom was almost pinned under a 5-drawer wooden dresser as he climbed on it.
33	I0910280A	<i>Date Received</i> 1/13/2009	4 YOF	Miami, FL	4 year old girl was trying to open her drawer chest & it came down on her. She sustained a bump on her head.
34	090129HEP9004	1/17/2009	4 YOF	Burlington, NC	Patient is a 4 year old female who was in her brother's bedroom watching tv. The tv sat on a dresser with 5 drawers. The child pulled out the drawers to climb up the dresser to turn off the tv. The dresser tipped over but not fully since it hit the bed, but the drawers came out. When the child & the tv fell off the dresser, one of the drawers hit the child on the top of the head. As a precaution, the mother took the child to the er where she was examined & released.
35	N0910374A 090121CNE4094	1/18/2009	2 YOM	Bradenton, FL	A two-year-old male reached up to the television set on top of a chest of drawers while standing on a child size chair. The television set along with the chest of drawers toppled over on the victim. He suffered a skull fracture.

36	090210HEP9004	1/30/2009	2 YOM	Dupont, WA	The 2 year old male victim was diagnosed with concussion to the head. The victim's father advised that normally when he wakes up he climbs into bed with him. However, on this day he decided to open all the drawers in the dresser. This caused the dresser to tilt. A 32 inch tv, sitting on top of the dresser, slid off hitting the victim in the head. The victim was taken to the er where he was treated and released.
37	090226HEP9003	2/17/2009	4 YOM	Greensboro, NC	Patient is a 4 year old male who was in his bedroom with his younger brother watching tv. The mother heard a loud noise & found the tv & dresser on the floor. The patient was limping so the mother took him to the er where he was treated & released.
38	090302HEP9003	2/17/2009	4 YOM	Philadelphia, PA	Patient is a 4 year old male who climbed up his dresser by pulling out the drawers to get some money & when he did this, the dresser & tv fell off onto the floor & he lacerated his lip when the dresser hit it. Patient was taken to the er, treated, & released.
39	H0920192A	2/18/2009	6 YO	San Fransco, CA	6 year old child opened all of the dresser drawers at one time & it became unstable. Some glass breakable items fell off of the dresser onto the floor and broke apart. No injuries
40	090407HEP9003	3/24/2009	2 YOM	Brooklyn, NY	The 2 year old male victim sustained cuts to his face and a bruise on his head when he pulled on a drawer in a bureau causing the bureau to tip over and fall on him. There was a tv on top of the bureau and it also tipped over and fell to the floor, however, it (the tv) did not hit the victim. The victim's mother was cleaning and did not see him go into his uncle's bedroom, where the bureau was located. The victim's mother cleaned his cut and took him to the er where he was treated and released. He is fully recovered
41	090407HEP9027	3/28/2009	4 YOM	New Haven, CT	Patient is a 4 year old male who climbed up his dresser by opening the drawers to get to the tv. The tv fell onto the bunk bed & the dresser was stopped by the bed. The child had a laceration on his face. Child was taken to the er, treated, & released.

42	090407HEP9025	3/30/2009	2 YOM	Bonita Springs, FL	Patient is a 2 year old male who climbed up his dresser by pulling out the drawers causing the dresser to tilt over & the tv to fall off & land on the bed. The tv hit him on the forehead area. Child was taken to the er, treated, & released.
43	090424HEP9009	4/21/2009	3 YOM	Forth Worth, TX	The 3 year old male victim was sleeping in his room. He woke up about 8:30 pm and decided to put a dvd into his dvd player. The player is part of the tv and sits on top of a dresser, which was anchored to the wall. The victim climbed up on the dresser to put the dvd into the machine but the anchor broke and the tv and dresser fell over. The victim was knocked back onto the bed. The dresser fell on him and he was hit in the head. The tv was on the floor and his mother feels it did not hit him. He sustained a contusion to the forehead. He was taken to the er where he was treated and released.
44	090430HEP9001	4/21/2009	11 MOM	Douglasville, GA	The 11 month old male victim sustained cuts and bruises to his head when, while playing at his cousin's house, in the bedroom, he pulled on the top drawer of the dresser with the tv sitting on top of it. This caused both the tv and the dresser to fall over. They came down on top of the victim with the tv hitting his head and the dresser landing on his feet. His mother heard the crash and ran into the room. She took the victim to the hospital immediately. There he was treated and released. She followed the next day with a visit to the family doctor. All was okay.
45	090501HEP9003	4/24/2009	3 YOF	Jacksonville, AL	Patient is a 3 year old female who went to her bedroom to get clothing from her dresser on which a tv sat along with a vcr, direct tv box. When she opened the dresser drawer, the dresser, tv, vcr & direct tv box fell off & either the vcr or direct tv box hit her on the side of the head. Patient was taken to the er, examined, & released.
46	090514HEP9010	5/3/2009	2 YOM	Pittsfield, MA	Patient is a 2 year old male who climbed up his dresser by opening the drawers to change the channel. The tv & furniture fell off & the tv hit his ankle. Child was taken to the er, treated, & released.

47	090603HEP9018	5/6/2009	16 MOM	Philadelphia, PA	Patient is a 16 month old male who was watching tv & he climbed up his dresser by pulling out the drawer. The dresser tilted over & the tv only fell off & hit him in the nose. Patient was taken to the er, treated & monitored, & released.
48	090514HEP9001	5/7/2009	2 YOM	Tacoma, WA	The 2 yom victim was watching tv in his bedroom. The tv sits on top of a bureau. The victim wanted to change the channel so he pulled out the bottom drawer of the bureau and tried to use it to climb up the bureau to the tv. When he put his foot on the bottom drawer the bureau tipped over and the tv, which was on the bureau, fell over. When they fell over the tv brushed against the victim's head. His parents went into the room, found the victim and took him to the er. He was treated and released and is fully recovered.
49	090603HEP9012	5/9/2009	3 YOM	Marysville, WA	A 3 year old male was playing & watching tv in his bedroom. His mother was fixing dinner in the kitchen. She heard a loud crash. Both parents ran into the bedroom & found the victim lying on the floor with the dresser and tv that was on the dresser, lying on the floor next to the victim. The victim's mother said the victim climbed into the bottom drawer of the dresser. This caused both the dresser and the tv to fall over with the tv brushing the victim's eyebrow, resulting in a laceration to the eyebrow. The victim was taken to the er where he was treated and released.
50	090615HEP9005	5/11/2009	22 MOM	Brady, TX	The 22 month old male victim was in his bedroom playing. There is a dresser in the bedroom with a tv on top as well as fish food. The victim's mother feels he was attempting to reach the fish food by climbing up on the dresser. She heard a bang and ran into the bedroom. She found the victim on the floor with the tv on top of him and the dresser on the floor. The victim's mother saw he had been hit on the head, so she called 911 and the victim was taken by ambulance to the er. There he was treated and admitted. He was hospitalized for three days and then released. He is fully recovered.

51	090603HEP9024	5/17/2009	4 YOM	Philadelphia, PA	Patient is a 4 year old male who climbed up his sister's dresser's by pulling out the drawer to retrieve the remote control for the tv. Both the tv & dresser fell over. Hitting the patient on the hand & face. Patient was taken to the er, treated, & released.
52	090603HEP9026	5/20/2009	4 YOM	Columbus, OH	A dresser fell on a 4 year old boy when he attempted to turn the television on the dresser. The boy sustained a bruise to the head & scratches on his legs. Victim was taken to er, treated and held 4 hours for observation. He is fully recovered.
53	090603HEP9022	5/26/2009	2 YOM	Tucson, AZ	A 2 year old boy was watching television in his room when he decided to change the station. He climbed up on a dresser to reach the tv but before he reached it the dresser the tv tipped over and fell to the floor. The tv hit the victim on the left foot. When his mother found him he was crawling away from the tv & the dresser. His mother put ice on his foot but he continued to cry and his foot continued to swell. She took him to the hospital where he was treated and released.
54	090625HEP9001	5/31/2009	3 YOM	Henderson, NV	The 3 year old male victim was diagnosed with a head injury. The victim was climbing on a dresser to get a toy that was on top of the tv which was sitting on the dresser. As he was climbing on the dresser it tipped and caused the tv to fall over onto the floor. As the tv fell it hit the victim on the top of his head. The tv wound up on the victim and his mother had to move the tv off of him. The victim was taken to the er where he was treated and released
55	090918HEP9005	6/27/2009	3 YOM	Fort Worth, TX	The 3 year old male victim was diagnosed with a fractured head. The victim's sister sent him for a pair of scissors that was in his mother's bedroom. The victim climbed up on the dresser, to turn the tv on. This caused the tv to tip over, fall to the floor and hit the victim on the head. The dresser went sideways. The victim's mother found him with the tv lying on the floor. The victim's mother said her son did not cry and she did not realize, at the time, that the tv had hit him. Several hours later the victim was given a glass of water and threw it up. That was when it was

					realized something was wrong. The victim was taken to the er by his mother where he was treated and admitted for 2 nights.
56	I0980031A 090806CWE8415	7/1/2009	2 YOF	Edmonds, WA	An adult female bought a crib, a bookcase and a dresser for the nursery of a male child with which she was pregnant. On the day that the furniture was delivered, the complainant's 2 1/2 year old daughter leaned on the open drawer of the dresser and caused the piece to tip slightly. The adult female stabilized the dresser and separated her daughter from it. After several hours the adult female decided the furniture was dangerously unstable. She eventually returned it to the retailer. The furniture was never used with her infant son.
57	Mfr/Retailer Rpt 141118CBB3152	7/25/2009	7 YOM	West Covina, CA	A four-drawer dresser had been in a seven year old male's bedroom for two years. The dresser tipped over when two drawers were opened at the same time, by the seven year old child. A television set that had been sitting on top of the dresser, also tipped over. The child was able to move out of the way, receiving only a minor scratch. The dresser was returned to the retail store after the incident.
58	090903HEP9007	7/27/2009	2 YOF	Columbus, OH	Patient is a 2 year old female who climbed up her dresser where a tv sat. Both the tv & dresser fell over with the dresser landing on top of her. Patient was taken to the er, treated, & released.
59	090814HEP9011	8/6/2009	2 YOM	Greensboro, NC	Patient is a 2 year old male who was in the bedroom with his mother & sister. The sister was climbing up the dresser drawers & the tv sat on the top of the dresser. Both the dresser & tv fell over & the tv hit the patient's nose & fractured it. Patient was taken to the er, treated, & released.

60	090903HEP9009	8/11/2009	23 MOF	Riverdale, GA	Patient is a 23 month old female who climbed up her dresser by pulling out the drawers to get to the tv. Both the tv & dresser fell over & hit her head. Patient was taken to the er, treated, & released.
61	090827HEP9007	8/23/2009	3 YOM	Puyallup, WA	The 3 year old male victim was diagnosed with a head injury. The victim was playing a video game and pulled too hard and the tv, which was attached to the video game, and dresser fell on his head. The victim was found with his head under the tv. The victim's mother took him to the er where he was treated and released.
62	H0990120A	9/10/2009	M	Alexandria, VA	The consumer's husband had the top 2 drawers of the dresser open & was placing clothing inside of them, when he stepped away from it. Upon returning, he found that the dresser had tipped over. No injuries.
63	091008HEP9020	9/22/2009	3 YOF	Denver, CO	The 3 year old female victim was diagnosed with a head injury. The victim was trying to get a dvd off the top of the tv and the dresser it was sitting on fell forward and the tv slid on to her head. The victim's mother took her to the er where she was treated and released.
64	091008HEP9023	9/30/2009	2 YOM	Coatesville, PA	Patient is a 2 year old male who pulled out a dresser drawer to climb up his dresser to get to the tv. Both the tv & dresser tipped over & patient was hit on the head with the tv. Patient was taken to the er, treated, & released.
65	091008HEP9021	10/3/2009	4 YOM	Tacoma, WA	The 4 year old male victim sustained a laceration to the head when he attempted to get a dvd box off the chest the tv was on and he hit the tv causing it to fall over hitting his head and giving him a bloody nose. His father was able to stop the nose from bleeding than he took him to the er where he was treated and admitted.

66	091022HEP9003	10/6/2009	2 YOM	Everett, WA	The 2 year old male victim was diagnosed with a contusion to the head. The victim was using the dresser as steps to get to the 30-inch tv. The dresser started to lean and the tv and the dresser fell over, hitting the victim on the head. The victim's mother said the furniture was old and shaky to begin with. The victim's mother took him to the er where he was treated and released.
67	091015HEP9017	10/11/2009	3 YOM	Staten Island, NY	Patient is a 3 year old male who climbed up his dresser by opening the drawers & the tv fell off & the dresser tilted over. The tv hit him on the head. Patient was taken to the er, treated, & released.
68	091106HEP9003	10/23/2009	3 YOF	Crowley, TX	The 3 year old female victim was diagnosed with a head injury. The victim was climbing on the chest of drawers in an attempt to get a dvd to put on when the chest tipped forward and all the drawers fell forward. The tv, which was on the dresser, tipped over and fell on her. The tv remained on her and had to be removed by her uncle. Her grandmother and uncle took her to the er where she was treated and released.
69	091116HEP9053	10/27/2009	2 YOF	Philadelphia, PA	2 yo female - tv and tv stand fell on pt. Dx face contusion
70	091113HEP9005	11/4/2009	3 YOM	Marion, VA	The 3 year old male victim was in the bedroom watching tv. The tv sits on top of a chest. The victim pulled the bottom drawer of the chest out and stood in it. This caused the tv and the chest to tip over and fall. The chest brushed against the victim's head but it served to prevent the tv from actually hitting the victim. He was taken to the er where he was treated and released.
71	091119HEP9093	11/10/2009	15 MOM	Corpus Christi, TX	The 15 month old male victim was diagnosed with a contusion to the wrist. The victim was playing in the room with his sister. She had a dresser drawer out and was standing in it. The tv was on top of the dresser. The dresser fell over throwing the 27 inch tv forward. As it fell forward it hit the victim on the wrist. The victim was taken to the er where he was treated and released.

72	091119HEP9097	11/14/2009	3 YOM	Canal Winchester, OH	Patient is a 3 year old male who opened the drawers of his dresser & climbed up the dresser to get to the dvd. The tv fell off & hit him in the forehead & the dresser tilted over but was stopped by the bed. Patient was taken to the er, examined & released.
73	091119HEP9092	11/15/2009	2 YOF	Ft Lewis, WA	The 2 year old female victim was diagnosed with a head injury. The victim was climbing on the dresser using the drawers in the dresser as steps. This caused the dresser to fall over with the tv, which was on top of the dresser. When the tv fell over it hit the victim on the head. The victim's mother cleaned the blood from her head and took her directly to the er where she was treated and released.
74	X11B0762A	11/16/2009	5 YOF	Pflugerville, TX	5 YOF was severely injured when she climbed on a dresser & it fell on top of her. It landed on top of her head & fractured her skull in three places. She underwent life-saving surgery at children's hospital. Surgery left a large scar on her head.
75	091203HEP9004	11/28/2009	3 YOM	Ft Myers, FL	Patient is a 3 year old male who opened the drawer's of his sister's dresser to climb up to reach the tv. Both the tv & dresser fell over, but only the tv hit him on the head. Patient was taken to the er, treated, & released.
76	091214HEP9001	11/30/2009	18 MOM	Canal Winchester, OH	The 18 month old male victim was diagnosed with an head injury. The victim was playing with the drawers of the chest that had a tv on top of it. The 20 inch tv and the chest fell over hitting him on the head. The victim was taken to the er by his mother where he was treated and released.
77	091217HEP9001	12/9/2009	2 YOF	Ft Lewis, WA	The 2 year old female victim was diagnosed with hemorrhage to the face. The victim pulled her dresser drawers out and used them as steps. The victim's mother said the 19 inch tv and the dresser fell. The victim's mother stated that it was the box shelves that hit her. The victim had a bruise on her head and both sides of her nose was bleeding., the victim's mother took her to the er where she was treated and released.

78	091230HEP9002	12/12/2009	2 YOF	Lincoln Park, MI	Patient is a 2 year old female who pulled out her dresser drawers to climb up the dresser so she could be closer to the tv that sat on the dresser. Both the tv & dresser fell over & she was hit on the forehead with the tv & the leg with the dresser. Patient was taken to the er, examined, & released.
79	Mfr/Retailer Rpt 140917CBB1952	12/15/2009	8 YOM	Newark, NJ	A six drawer tall chest of drawers tipped over narrowly missing an eight year old male. The child had been opening a middle drawer when the unit tipped over. An upper drawer was also open at the time the unit tipped over. A 22 inch flat screen television set was on top of the unit at the time that it tipped over. The television fell to the floor. The consumer had secured the dresser to the wall behind the unit with the strap and screw provide by the manufacturer. The screw pulled out of the wall when the unit tipped over. The strap did not break during the incident. There were no injuries.
80	I1090136A 100907CCC3092	12/21/2009	3 YOF	Chappell Hill, TX	A 3 year old female victim sustained bruises to her legs when a dresser fell forward and landed on top of her. The victim was reported to have been leaning over the dresser's opened top drawer with all her weight when the incident occurred. The dresser was tethered to the wall by means of a plastic zip-type strap and mounting docks that broke when the dresser tipped forward. The victim made a full recovery without medical intervention.
81	100105HEP9003	12/29/2009	2 YOM	Staten Island, NY	Patient is a 2 year old male who was in his bedroom where a tv sat on a dresser. Patient got his foot caught in the tv's cord & both the tv & dresser went over. The tv hit the patient on the face. Patient was taken to the er, treated & released.

82	100310HEP9052	1/6/2010	2 YOF	Winnsborro, LA	2 year old female victim was diagnosed with a face injury. The victim's family was staying in a motel. The victim was getting a shirt out of an open drawer in a dresser when the drawer slid out & the dresser tilted forward. The 27 inch tv, that was on top of the dresser, slid forward & hit the victim in the face. The bottom drawer of the dresser kept the dresser from completely falling over. When the tv slid into the victim's face it knocked her 2 top front teeth out & cut her lip. The victim was taken to the er where she was treated & released . She also was scheduled for follow-up exams.
83	100310HEP9021	1/11/2010	2 YOF	Columbus, OH	The 2 year old female victim was diagnosed with a fractured elbow. The victim and her 3 year old brother were playing and climbed up on the dresser where the tv was sitting. This caused the 26 inch tv/vcr/dvd player and the dresser to tip and fall over. The victim's arm was pinned under the dresser. The 3 year old brother was not injured. The victim's mother took her to the er where she was treated and admitted for 1 night.
84	100310HEP9065	1/12/2010	2 YOM	Denver, CO	The 2 year old male victim was diagnosed with a head injury. The victim was climbing on a dresser that had only 3 legs. A brick was used as the fourth leg for a base. The victim was using the drawers of the dresser as steps so he could climb up on the tv. And the 27 inch tv fell on him bruising his head. It rested on him from the neck up. The chest was on him from waist down. The victim's mother called 911 and he was taken by ambulance to the er where he was treated and released the same day.
85	100310HEP9057	1/15/2010	4 YOF	Everett, WA	The 4 year old female victim was diagnosed with a head injury. The victim had been playing with her jump rope and wrapped her rope on the knob of the dresser which had a weak leg. The tv was sitting on top of the dresser. The victim was pulling on the rope and the dresser fell forward and the 19 inch tv slid off and hit her in the head. The victim's mother put ice on her head and then took her to the er where she was treated and released.

86	100310HEP9010	1/29/2010	2 YOM	Fort Worth, TX	The 2 year old male victim was diagnosed with a head injury. The victim used the drawers in a chest the tv was on as stairs. The tv tipped and fell forward, hitting the victim on the head. The victim was taken to the er by his mother where he was treated and released
87	100310HEP9050	2/2/2010	3 YOF	Greensboro, NC	Patient is a 3 year old female who was in her bedroom. Patient opened her dresser drawers to climb up the dresser where the tv sat. The tv & dresser fell over & tv hit the top of her head. Patient was taken to the er where she was examined & released.
88	100310HEP9063	2/3/2010	4 YOF	Union City, CA	The 4 year old female victim was diagnosed with a head injury. The victim was climbing on the dresser to get a pair of underwear out of the top drawer when the dresser fell forward and the 25 inch tv, which was on top of the dresser, fell forward and hit her in the head. The victim's mother said the tv rolled off but the chest did not. The victim's mother took her to the er where she was treated and released.
89	100310HEP9051	2/6/2010	20 MOM	West Haven, CT	Patient is a 20 month old male who used the ledge of the dresser to climb up to the tv that sat on the dresser. The tv & dresser fell over, but only the dresser hit him, primarily on the head. Patient was taken to the er, treated, & released.
90	100310HEP9066	2/6/2010	4 YOM	Ft Lewis, WA	The 4 year old male victim was diagnosed with a head injury. The victim was playing with a video game and bumped into the dresser holding the tv. This caused the tv to fall over, brushing the victim's head and back. The victim's 7 year old friend pushed him out of the way, preventing a more serious accident. The victim was taken to the er where he was treated and released.
91	100310HEP9055	2/10/2010	3 YOM	Aurora, CO	The 3 year old male victim was attempting to turn on the tv. The tv was on top of a dresser. He used the drawers in the dresser as steps and started to climb up the dresser. This caused the tv on top of the dresser to tip over and fall. When it fell it hit the victim on the leg resulting in an abrasion. He continued to complain that his leg hurt so two days later he was taken to the er where he was treated and released.

92	100310HEP9070	2/10/2010	2 YOM	Everett, WA	The 2 year old male victim was diagnosed with a contusion to the finger. The victim was trying to put a dvd into the dvd player, which is on the tv. He climbed on the dresser where the tv and dvd player sit. He used the dresser as steps, causing both to tip over. The tv and the dresser fell. The tv hit his finger but the bed caught most of the weight of the tv. The victim's mother took him to the er where he was treated and released.
93	100311HEP9004	2/18/2010	17 MOM	Tucson, AZ	The 17 month old male victim was diagnosed with a head injury. The victim stepped on the bottom drawer of the dresser the tv was on. This caused the tv and the dresser to tip over and fall on him. He was hit on the head. The victim's mother had to remove the 19 inch tv and the dresser off his body. The victim's mother called 911 and he was taken to the er by ambulance where he was treated and released.
94	100319HEP9006	2/22/2010	17 MOM	Alvarado, TX	Patient is a 17 month old male who opened his brother's dresser drawers to climb to the tv which sat on top of the dresser. Both the tv & dresser fell over, but only the dresser fell on top of him. Patient fractured his upper arm. Patient was taken to the er, treated, & released.
95	100311HEP9002	2/23/2010	4 YOM	Lakewood, WA	The 4 year old male victim was diagnosed with a fracture shoulder. The victim was playing in a room he should not have been and climbed on a dresser with a tv on top. He knocked the 36 inch tv and the dresser down. The victim was hit in the shoulder with the tv. The victim's mother had to remove the tv off of his shoulder. The victim was taken to the er by his father where he was treated and released.
96	100923HEP9006	3/15/2010	2 YOF	Bronx, NY	Patient is a 2 year old female who was in her bedroom where a tv sat on a dresser. Patient opened the dresser drawers to climb up to the tv & both the tv & dresser fell over. The dresser hit her on her face/nose & she was pinned under the dresser. The tv did not hit her. 911 was called & she was taken to the er, examined & released.

97	100401HEP9002	3/22/2010	2 YOM	Grove City, OH	The 2 year old male victim was diagnosed with a head injury. The victim was climbing up on an empty dresser frame used to hold a tv. His climbing caused the dresser to tip over and both the dresser and the tv fell over hitting the victim on the head. The victim was taken to the er by ambulance where he was treated and released .
98	100422HEP9010	4/4/2010	3 YOM	Crowley, TX	Patient is a 3 year old male who climbed on his dresser to get to the tv that sat on the dresser. Both the tv & dresser fell on top of him causing a lacerated mouth. Patient was taken to the er, treated, & released.
99	100422HEP9018	4/13/2010	3 YOF	Corpus Christi, TX	The 3 year old female victim was diagnosed with a contusion to the head. The victim was getting clothes out of her dresser drawer. When she pulled on the dresser drawer the dresser tilted forward. This caused the tv, which was on top of the dresser, to slide off the dresser and hit the victim on the head and mouth. When the tv hit her she sustained a cut on the head and it also knocked her left front tooth 1/2 way out. The victim went to the er by ambulance where she was treated and released.
100	100422HEP9017	4/18/2010	4 YOF	Ridge, NY	Patient is a 4 year old female who climbed up her dresser to reach the tv. Both the tv & dresser fell over & she received a gash to her head. Patient was taken to the er, treated, & released.
101	100430HEP9002	4/18/2010	4 YOM	Collingdale, PA	The 4 year old male victim was diagnosed with a laceration to the face (chin). The victim and a friend were at a birthday party. They were playing in the friend's bedroom. The victim and his friend were climbing on a dresser, using the drawers as steps. Their weight, from stepping in the drawers, caused the 37 inch tv and the dresser to tip over and both fell on the victim, cutting his chin. The victim was taken to the er where he was treated and released.

102	100430HEP9008	4/23/2010	2 YOM	Denver, CO	The 2 year old male victim was diagnosed with a hematoma to the face. The victim was climbing on the dresser where the tv sat. His weight caused the tv and the dresser to tip. This resulted in the 18 inch tv tipping over and falling off the dresser. When it fell over it hit the victim in the face. The victim's parents took him to the er where he was treated and released.
103	100507HEP9003	4/29/2010	3 YOF	East Peoria, IL	The 3 year old female victim was diagnosed with a laceration to the face. The victim was playing in her bedroom. She was with her brother. She started climbing on the dresser, using the drawers as steps. The tv was on the dresser. Her weight on the drawers caused the dresser to tip over and both the dresser and the tv fell. The victim was found with the tv still on her and her face was cut. The victim was taken to the er where she was treated and released.
104	100520HEP9005	5/3/2010	3 YOM	Baton Rouge, LA	The 3 year old male victim was diagnosed with a contusion to the head. The victim, while playing and watching tv in the bedroom, attempted to climb up on his mother's dresser. The tv sits on top of the dresser and the victim's mother feels he may have wanted to change the station. His weight on the dresser caused it to tip over. Both the dresser and the 27 inch tv fell over, with the tv hitting the victim. The victim's mother said her bed partially blocked the chest from falling. The victim's mother took him to the er where he was treated and released.
105	100520HEP9009	5/5/2010	3 YOM	Gonzales, LA	The 3 year old male victim was diagnosed with a head injury. The victim was in his sister's bedroom watching tv. The tv sits on top of a dresser. The victim was attempting to reach the tv using the dresser to climb on. He was using the drawers of the dresser as steps. He pushed in one of the drawers a little too hard, causing the dresser to tip over and both the dresser and the tv fell on the victim. The victim was hit on the head. The victim was taken to the er by ambulance where he was treated and released.

106	100520HEP9002	5/12/2010	4 YOM	Marion, VA	The 4 year old male victim was diagnosed with a contusion to the lower trunk. The victim 's mother turned the tv off, so the victim would clean his room. The mother unplugged the tv. The victim began to clean his room but then decided to plug the tv back in. He put one foot on the wall and the other on the dresser the tv was on for leverage and started to push. The dresser had a 6 inch screw in the back and it was bolted to a stud in the wall. The back of the dresser came loose causing it and the tv to tip over and fall on the victim and land on his hip. The victim's father had to lift the dresser while the mother pulled him out. He was taken to the er where he was treated and released.
107	100623HEP9003	6/6/2010	2 YOF	New Haven, CT	Patient is a 2 year old female who opened up the dresser drawers to climb up to the tv that sat on the dresser. Both the dresser & tv fell over, but only the dresser slightly hit her head/chest. The patient was more scared than anything. Patient was taken to the er, examined, & released.
108	100617HEP9001	6/7/2010	4 YOF	Bonita Springs, FL	Patient is a 4 year old female who was watching tv with her younger sister in the bedroom. The tv sat on a dresser & the patient opened the dresser drawer to climb to the tv. The tv & dresser fell over with the tv hitting the patient above the eye. The dresser hit the patient's younger sister in the chest area. 911 was called & both patient & sister were taken to the er, treated & released.
109	100617HEP9002	6/7/2010	2 YOF	Bonita Springs, FL	Patient is a 2 year old female who was sitting on her bedroom floor watching tv. The tv sat on a dresser. The patient's older (4 year old) sister opened the dresser drawer to climb up the tv & both the tv & dresser fell over. The dresser hit the patient on the shoulder & chest area causing a contusion to the chest. The patient & her sister were taken to the er, treated, & released.
110	100701HEP9005	6/11/2010	2 YOF	Auburn, WA	The two year old female victim sustained an abrasion to her stomach. She climbed up the drawers on her dresser to reach the tv that was on top of her dresser. The dresser tipped forward and the tv sitting on top of it fell onto her, landing on her stomach.

					She was taken by ambulance to the hospital where she was treated and released.
111	101105HEP9004	6/28/2010	4 YOM	Canal Winchester, OH	Patient is a 4 year old male who was in his bedroom where a tv sat on a dresser. It is believed the patient opened the dresser drawers to climb up to the tv/dvd. Both the tv & dresser fell over but partially landed on the bed. The patient was found under the dresser, but not pinned under it. The dresser may have hit his head so as a precaution, the patient was taken to the er, examined & held for observation.
112	100723HEP9002	7/4/2010	21 MOM	Atlantic City, NJ	Patient is a 21 month old male who was with his mother & sister in the bedroom where a tv sat on top of a 4 drawer dresser. The mother was behind the dresser hooking up the playstation when the patient opened up the bottom dresser drawer to see what his mother was doing. When the patient stood on the drawer, the tv & dresser started to go over. The mother caught the dresser & put in upright, but the tv hit the patient on the upper leg & fractured it. Patient was taken to the er, treated, & released.
113	100715HEP9007	7/5/2010	18 MOM	Lanham, MD	The 18 month old male victim was diagnosed with a possible bodily injury. The victim was pulling on a dresser that had tv sitting on top of it. The victim said he was rocking the dresser with his feet and pulling on it with his hands. The rocking of the dresser caused the dresser and the tv to fall over. The dresser came to rest on the victim and the tv was beside him. The victim was taken to the er where he was examined and released with no injuries.

114	100729HEP9014	7/8/2010	4 YOM	Marco Island, FL	Patient is a 4 year old male who went into his bedroom & they believe he opened the dresser drawers to climb up to the tv & dresser fell over. Patient was found pinned under the dresser unconscious. They think the tv hit him in the head. 911 was called & he was medivac to a hospital. Patient had a fractured skull, broken nose.
115	100723HEP9004	7/12/2010	4 YOF	Tracey, CA	The 4 year old female victim was diagnosed with a head injury. The victim was climbing in the bottom drawer of her dresser along with her sister. They were getting dressed. The tv sits on top of the dresser. Their climbing into the bottom drawer of the dresser caused the dresser to tip over. Both the dresser and the tv fell over and onto the victim, hitting her in the head and brushing against her sister. The victim was knocked unconscious. The victim was taken to the er by ambulance where she was treated and admitted for night.
116	100729HEP9002	7/12/2010	2 YOM	Aurora, CO	The 2 year old male victim was diagnosed with a contusion to the wrist. The victim was climbing up on his dresser. His tv sits on top of the dresser and he was trying to change the channel. His climbing caused the dresser to tip over and both the tv and the dresser fell over. The tv hit the victim left wrist. The victim was taken to the er where he was treated and released.
117	100729HEP9005	7/12/2010	2 YOM	Granite Falls, WA	The 2 year old male victim was diagnosed with a head injury. The victim was getting a shirt out of the dresser in his bedroom. He pulled the drawer a little hard and dresser tipped a little. That caused his tv/dvd player to fall forward and hit him on the head. The tv did not fall all the way to the floor because the cord stopped it. The victim was taken to the er where he was treated and released.
118	100729HEP9010	7/19/2010	2 YOF	Vineland, NJ	The 2 year old female victim was watching tv in her bedroom while her mother was unpacking moving boxes. The tv sits on top of a dresser. The victim started to climb up on the dresser to change the station. Her climbing on the dresser caused it to tip over. Both the dresser and the tv fell onto the victim causing

					abrasions on the upper part of her body. The dresser and the tv both came to rest on top of the victim. The victim was taken to the er by ambulance where she was treated and released.
119	100729HEP9011	7/22/2010	2 YOM	Pittsfield, MA	Patient is a 2 year old male who pulled out his dresser drawers to climb up to his tv that sat on the dresser. Both the tv & dresser fell over even though the tv was strapped to the wall. The patient was partially pinned by the tv/dresser, but was not injured (few contusions to body). Patient was taken to the er as a precaution. Patient was examined & released.
120	100820HEP9003	8/11/2010	2 YOF	Hayward, CA	The 2 yof victim was diagnosed with a laceration to the head. The victim was watching tv in her 3 year old sister's bedroom. The tv sits on top of a dresser. The victim's sister was climbing in the drawers of the dresser trying to reach the tv. Her climbing in the drawers caused the dresser to tip over & that knocked the tv over. Both the dresser & the tv fell over. The tv brushed the victim's head & she was cut. The victim was taken to the er where she was treated with stitches & admitted for 1 night.
121	I1130008A	8/19/2010	5 YOF UnkM	San Antonio, TX	We bought a dresser about two years ago. It has flipped over onto my daughter TWICE while trying to open her drawers. The small legs at the bottom of the dresser are not supportive enough to allow for it to not flip. The dresser is very heavy and it bruised my daughters arm and my son's leg. My baby was also in the room and it could have killed her had she been near the dresser when it flipped.
122	100913HEP9021	8/24/2010	2 YOF	St Louis, MO	The 2 year old female victim was diagnosed as other injury (no injury found). The victim was getting clothes out of her dresser. She had opened several drawers that caused the tv and the dresser to tip over and fall forward, hitting the victim. The victim's mother was not sure if the tv or the dresser or both hit the victim. Later in the day the victim's parents felt she was having trouble bending over so they took her to the er where she was treated

					and released.
123	100913HEP9027	8/24/2010	3 YOM	Chilton, WI	Patient is a 3 year old male who went into his mother's bedroom & opened the dresser drawers to climb up to the tv which sat on top of the dresser. The tv fell off & the dresser partially fell over landing on the bed. The patient was pinned under the dresser drawers & the tv was beside him. A neighbor helped in lifting up the dresser & the patient was taken to the er. Patient was examined & released - had a large bump on his head.
124	100913HEP9019	9/5/2010	13 MOM	Bronx, NY	The 13 month old male victim was diagnosed with a head injury. The victim was climbing on the dresser drawers in his bedroom to reach the tv that was on top of the dresser. His climbing on the drawers caused the dresser to tip. Both the tv and the dresser drawers fell on the victim. A drawer landed directly on him and the tv fell over top of him. Both hit his head. The victim was taken to the er where he was treated and released.
125	100923HEP9007	9/8/2010	2 YOM	New Haven, CT	Patient is a 34 month old male who was in his mother's bedroom where a tv sat on a dresser. The mother believes the patient opened the dresser drawers to climb up to the tv. Both the tv & dresser fell over but did not pin him under either one. The mother thinks the dresser drawers hit him in the chest & on the head. Patient was taken to the er & admitted overnight.
126	101022HEP9004	9/15/2010	3 YOF	Pasadena, CA	The 3 year old female victim was diagnosed with a fractured finger. The victim was climbing on the chest of drawers. The victim was using the drawers of the chest as steps to reach the tv that was on top of the dresser. The victim's weight on the drawer caused the dresser and the tv to fall over. The victim's hand and head were struck. The victim was taken to the er where she was treated and released.

127	101008HEP9010	9/17/2010	2 YOM	Aurora, CO	The 2 year old male victim was diagnosed with a fractured shoulder. The victim was climbing on a 4 drawer dresser with a tv on top of the dresser. He was in the drawers. This was in his bedroom. His climbing in the drawers caused the dresser to tip over. When the dresser tipped over the 14 inch tv, which sits on top of the dresser, also tipped over and fell. Both the dresser and the tv hit the victim on the shoulder. The victim was taken to the er where he was treated and released.
128	101008HEP9007	9/21/2010	20 MOM	Denton, TX	The 20 month old male victim was diagnosed with a fractured head. The victim was climbing and pulling on the top drawer of the dresser where the 26 inch tv sits. That caused both the dresser and the tv to fall over. The victim was found with the dresser on top of him and the tv off to the side on the floor. The victim stood up once the dresser had been moved. The victim's mother called 911 and he was taken by ambulance to the er where he was treated and released.
129	110217HEP9002	10/9/2010	19 MOM	Galloway, OH	The 19 month old male victim was diagnosed with a head injury. The victim and his sister were climbing on the dresser where the tv sits. Their climbing on the dresser caused and the 27 inch tv and the dresser to tip over and fall on them. The victim (and his sister) were taken to the er where they were treated and released.
130	110124HEP9002	10/10/2010	3 YOM	Springtown, TX	Patient is a 3 year old male who was with his family at a friend's cabin. A tv sat on a dresser & the patient opened the dresser drawers to climb to the tv. Both the tv & dresser fell over with the dresser hitting him in the head causing bruising, swelling, & bleeding. 911 was called & the patient was taken to the er & admitted.
131	101022HEP9006	10/15/2010	3 YOF	North Pekin, IL	The 3 year old female victim was diagnosed with a head injury. The victim was watching tv in the bedroom at her grandmother's house. She pulled the bottom drawer of the dresser out. The tv was sitting on top of the dresser. She (the victim) stood in the drawer. That caused the dresser to tip over which in turn caused

					the tv to tip over. Both fell over and hit the victim. The victim was found under the dresser with the tv on the side on the floor. The victim was taken to the er where she was examined and released.
132	101112HEP9007	11/1/2010	2 YOM	Johnson City, TN	The 2 year old male victim sustained a bruise to the head when, while watching a movie on a vcr that was on top of a tv, he attempted to change the movie. The tv and vcr both sit on top of a dresser. The victim pulled the drawers of the dresser out and started to climb on them to reach the vcr. His stepping into the drawers caused the tv and the dresser to tip over and fall. They both brushed the victim's head. He was found by his mother with the dresser on him and the tv off to the side on the floor. The victim was taken to the er where he was treated and released.
133	101203HEP9007	11/16/2010	2 YOM	Ft. Lewis, WA	The 2 year old male victim was diagnosed with a contusion to the face. The victim was suppose to be sleeping but he was not. The victim's parents are not sure if it was him or his brother that was climbing on the dresser that the tv was on. They think it was the victim. The climbing on the dresser caused the tv to fall over and the victim was hit in the face by the tv. The victim was taken to the er where he was treated and released.
134	101203HEP9009	11/18/2010	2 YOM	Baker, LA	The 2 year old male victim was diagnosed with a head injury. The victim was climbing on a dresser that the tv sits on. His mother was not there but she was told by the victim's grandmother that the victim pulled the drawers of the dresser out and was climbing on them trying to reach the tv. His climbing caused the dresser to tip over and both the tv and the dresser fell over. The victim was brushed by the tv on his head and the dresser fell on him. The victim was taken to the er where he was treated and released.

135	101203HEP9008	11/20/2010	3 YOF	Ft. Lewis, WA	The 3 year old female victim was diagnosed with a laceration to the face. The victim was climbing on the dresser drawer's to turn the channel of the tv. The dresser and the 40 inch tv fell over. The victim's arm was still under the tv when her mother got to her. The victim was taken to the er where she was treated and released.
136	110124HEP9001	12/3/2010	3 YOF	Obetz, OH	The 3 year old female victim was diagnosed with lower trunk (back) pain. The victim was in her bedroom watching tv and playing. Her toy building blocks were on top of the dresser along with the tv and a dvd player. The victim wanted to get the toy blocks so she pulled out the drawers of the dresser and started to climb up on the dresser. Her climbing on the dresser drawers caused the dresser to tip over and everything (tv, dvd player and blocks) fell over, hitting the victim on the back. The victim was taken to the er where she was treated and released.
137	101230HEP9004	12/20/2010	2 YOF	Tacoma, WA	The 2 year old female victim was diagnosed with a contusion to the head. The victim was standing in front of the tv. The victim's 3 year old brother pulled all the drawers of the bureau the tv sits on open. That caused the tv and the bureau to fall over, hitting the victim. The victim was taken to the er where she was treated and admitted.
138	110118HEP9003	1/4/2011	2 YOF	San Angelo, TX	The 2 year old female victim was diagnosed with a contusion to the head. The victim was watching tv in her room. Her mother thinks she wanted to change the station so she climbed on the dresser to get to the tv. As she was climbing the dresser tipped and both the dresser and tv fell over, hitting the victim on the head. The victim was taken to the er where she was treated and released.
139	110124HEP9006	1/7/2011	3 YOM	Rockport, TX	The 3 year old male victim was diagnosed with a laceration to his head. The victim was in his bedroom. His tv sits on top of a dresser. The victim's mother thinks that the victim climbed up on the dresser so he could reach the tv and turn it on. As he was climbing on the dresser it tipped over and both the dresser and

					the tv fell over, hitting the victim on the head. He sustained a cut on his head. He was taken to the er where he was treated and released.
140	H1110147A	1/8/2011	4 YOF	Homestead, FL	4 yof was opening drawers of dresser when the dresser toppled onto her. She sustained a laceration on her right ear. Also, 4 yof's bed of the same brand has a large gap between head and footboard. She has fallen into the gap and suffered minor scratches.
141	110527HEP9038	1/13/2011	7 YOM	Johnson City, TN	The 7 year old male victim was diagnosed with a contusion to his right hip. The victim was climbing up on the dresser drawers to change the channel on the tv. The tv was on top of the dresser. The dresser began to tip and the victim grabbed the 37 inch tv. When the he grabbed the tv he pulled it down and it fell on him. The victim was taken to the er where he was treated and released.
142	110128HEP9004	1/14/2011	3 YOM	Aransas Pass, TX	The 3 year old male victim was diagnosed with a laceration to the face. The victim was playing and watching tv with his 5 year old brother. His brother, in an attempt to change the station, started climbing on the dresser where the tv sits. That caused both the dresser and the 17 inch tv to fall over. The victim was hit on the forehead by the dresser. The victim's father put pressure on his head where the cut was and the his mother called 911. The victim was taken to the er by ambulance where he was treated and released.
143	110128HEP9003	1/18/2011	3 YOM	Ft Lewis, WA	The 3 year old male victim was diagnosed with a laceration to the head. The victim's mother advised that she is not sure what happened. The victim was in his room watching tv when his mother heard him cry out. When she went to see what was wrong she found him crying and the bureau, with the tv that was on top of it, were on the floor. When she checked the victim she found a small cut on the back of his head. The victim was taken

					to the er but his mother advised that it was taking so long to be seen and that the victim seemed okay, so they left without being seen.
144	110204HEP9006	1/25/2011	2 YOM	Los Angeles, CA	The 2 year old male victim was diagnosed with a head injury. The victim was playing with his dresser drawers. That caused the dresser to tip over and fall forward. The 27 inch tv, which sits on the dresser, also slipped off and fell over. The victim's mother believes that it was a dresser drawer corner that hit the victim in the head, not the tv. The victim was taken to the er where he was treated and released.
145	110304HEP9017	2/10/2011	2 YOM	Fort Worth, TX	The 2 year old male victim was diagnosed with an avulsion to the foot. The victim was climbing on the drawers of his 10 year old brother's dresser to get something out of the top drawer. His brother put it there attempting to hide it from the victim. His climbing caused both the dresser and the 32 inch tv to tip over and fall. The dresser was on top of the victim and the tv was on the floor next to him. The victim was taken to the er where he was treated and released.
146	110331HEP9006	2/25/2011	4 YOF	Everett, WA	The 4 year old female victim was diagnosed with a head injury. The victim was watching tv in her bedroom. The tv rests on top of a dresser. The victim's mother thinks the victim used the dresser drawers to climb on so she could either change the station or the volume. Climbing on the dresser drawers caused both the dresser and the tv to fall over and hit the victim on the head. The victim was taken to the er where she was treated and released.

147	110321HEP9001	3/15/2011	3 YOM	Tucson, AZ	The 3 year old male victim was diagnosed with a head injury. The victim was climbing on a dresser to change a dvd. The dvd player and the 26 inch flat panel tv sit on top of a dresser. His climbing on the dresser caused the dresser, tv and dvd player all to fall onto the victim. The victim's father stated that when he got to him part of the tv and dresser were still on top of him and had to be removed. The victim was taken to the er where he was treated and released.
148	110331HEP9002	3/18/2011	4 YOF	Krum, TX	The 4 year old female victim was diagnosed with a head injury. The victim was climbing on her dresser to change the station on the tv which was on top of her dresser. The dresser tipped forward and the victim slipped and fell. The tv also fell over and hit her on the head. It then landed on her leg. The victim's leg was still under the tv when her mother reached her. The victim was taken to the er where she was treated and released.
149	Mfr/Retailer Rpt 140917CBB2894	3/29/2011	4 YOM	Dunwoody, GA	A father purchased and assembled a chest of drawers including securing the chest to the wall using anti-tip hardware. The father's four-year-old son began climbing on the chest when it started to tip towards the boy. The father intervened and caught the chest before it landed on the boy and was able to prevent any injuries from occurring. The anti-tip hardware failed to prevent the chest from tipping.
150	110408HEP9006	3/30/2011	4 YOF	Lucerne, CA	The 4 year old female victim was diagnosed with a fractured skull. The victim had been sick and was in her bedroom watching a movie on tv. The victim's mother said she thinks she was climbing up on the drawers on the dresser to get to a jewelry box the mother had put on top of the tv. The jewelry box had been placed there because it was broken. Her climbing on the dresser caused both the dresser and the 27 inch tv to fall over. The victim was hit on the head by the dresser and was still under the dresser when the victim's sitter got to her. The victim was taken to the er where she was treated and admitted.

151	110516HEP9012	4/16/2011	2 YOF	Brooklyn, NY	The 2 year old female victim was diagnosed with a laceration to the face. The victim was climbing on the dresser using the drawers as steps. Her mother was not sure what she was trying to do but her climbing on the dresser, where the tv sits, caused both the tv and the dresser to fall over and hit the victim on the face. The victims mother called 911. The victim was taken to the er by ambulance where she was treated and released, with no follow-ups needed.
152	110516HEP9020	4/17/2011	21 MOF	Douglasville, GA	Patient is a 21 month old female who was in her bedroom where a tv sat on a dresser. The patient opened the dresser drawers & climbed up to the tv. The tv & dresser fell over & the patient was pinned under the dresser. The mother found the child & she taken to the er, treated, & released. Patient had a contusion to her lip.
153	110516HEP9034	4/25/2011	4 YOM	Corpus Christi, TX	The 4 year old male victim was diagnosed with a head injury. The victim was pulling on his dresser drawer. A 19 inch tv was on top of the dresser. His pulling on a drawer caused the tv to tilt forward and fall. The victim was hit on the head by the side of the tv. The victim's mother called the hospital and was advised to bring him in. The victim was taken to the er by his mother where he was treated and released.
154	11150525A 110531CNE1229	5/1/2011	4 YOF	Groton, MA	A four-year-old girl was entrapped when her bedroom dresser tipped over and pinned her against her bed. The victim's mother quickly removed the dresser and there was no resultant injury. Although the victim's parents suspected a design flaw with the dresser, the exact cause of the tip over was unknown.
155	110808HEP9003	5/6/2011	2 YOF	Hurst, TX	Patient is a 2 year old female who was a friend's home & in the bedroom where a tv sat on a dresser. The patient opened the dresser drawers to climb up to get to the dvd. Both the tv & dresser fell over. The dresser pinned her legs & the tv hit her head, causing bleeding from the ear. 911 was called & the child was admitted for 4 days. Patient had fractured skull. Full recovery.

156	110527HEP9033	5/7/2011	5 YOM	Richmond, CA	The 5 year old male victim was diagnosed with a head injury. The victim was putting something in his dresser drawer and pulled too hard on the drawer. It fell on him and the 32 inch tv that was on the dresser fell forward and hit him in the head. The victim's mother put ice on his head and took him to the er. The victim was treated and released.
157	110526HEP9002	5/9/2011	2 YOF	Ft. Worth, TX	Patient is a 2 year old female who was in her bedroom watching cartoons on her tv. The mother believes that the child opened the dresser drawers to climb up to the tv. Both the tv & dresser fell over & the child was pinned under the dresser. The tv was near her head. The mother lifted the dresser off the child & the mother called 911. The child was taken to the er, examined, & released. Patient had a face laceration.
158	110519HEP9013	5/13/2011	4 YOM	New Haven, CT	Patient is a 4 year old male who was in his mother's bedroom where a tv sat on dresser. The patient climbed in the dresser drawers & the tv & dresser fell over, but did not pin him under them. The tv hit the patient's head causing a laceration. The patient was taken to the er, treated, & released.
159	110526HEP9007	5/17/2011	4 YOF	Henderson, NV	The 4 year old female victim was diagnosed with a laceration to the face. She was watching tv in her room. Her mother thinks she wanted to change the station and was climbing on the dresser drawers to reach the tv on top of the dresser. The dresser tipped and the tv fell off, hitting the victim. The victim was taken to the er where she was treated and released.
160	110623HEP9001	5/18/2011	4 YOM	Circleville, OH	Patient is a 4 year old male who was in his bedroom with a 6 year old friend & his sisters. The friend opened the dresser drawers to climb up to the tv which sat on the dresser. Both the dresser & tv fell over. The patient had his back to the tv/dresser so when they fell over, the dresser fell on his back & the patient's face/head hit the metal frame of the bed as he fell. The patient was pinned under the tv. The patient was taken to the er, examined & released. Patient was observed for a concussion.

161	110609HEP9013	5/31/2011	2 YOM	Johnson City, TN	The 2 year old male victim was diagnosed with a head injury. The victim had a tv on top of a dresser furniture set. The victim was opening the top drawer of the dresser to get a diaper out. The 20 inch tv and dresser both fell over. The tv hit him on the head. The victim was taken to the er where he was treated and released.
162	110718HEP9013	7/10/2011	2 YOF	Republic, PA	The 2 year old female victim was diagnosed with a head injury. The victim's mother advised that the victim was playing in the bedroom with her older sister. The victim's mother heard a crash and raced into the bedroom. She found the victim lying on the floor with the tv, and dresser it was on, on the floor next to the victim. The victim's mother assumes the victim and/or her sister attempted to climb up on the dresser to reach the tv and turn it on. The dresser and tv fell over, hitting the victim on the head. The victim was taken to the er where she was treated and admitted.
163	110808HEP9004	7/24/2011	3 YOF	Haltom City, TX	Patient is a 3 year old female who was in her bedroom where a tv sat on a chest of drawers. The mother believes the child opened the drawers to climb up to the tv which caused the tv & chest to fall over. The tv hit the floor & the chest fell against the footboard. The child was wedged between the chest & footboard. The chest hit her face & upper torso. The child was taken to the er, examined, & released.
164	110808HEP9007	7/24/2011	2 YOM	Teaneck, NJ	Patient is a 30 month old male who was in his bedroom where a tv sat on a dresser. The patient opened the dresser drawers to climb up to the tv which caused both the tv & dresser to fall over. The tv or dresser hit his head causing a minor cut on his head. The child was taken to the er, treated, & released.
165	110811HEP9001	8/3/2011	8 YOM	Douglasville, GA	The 8 year old male victim was diagnosed with a head injury. The victim was pulling on his chest of drawers to get school clothes out when the dresser and the 13 inch tv tipped over and fell, hitting the victim on the head. The victim was taken to the er where he was treated and released.

166	110822HEP9013	8/12/2011	5 YOM	Ft. Myers, FL	Patient is a 5 year old male who was at his grandmother's house & was in her bedroom where a tv sat on a dresser. The patient opened the dresser drawer to climb up the dresser & retrieve the video game on the top of the dresser. In doing so, both the dresser & tv fell over & hit him in the head as they were falling. 911 was called & the patient was taken to the er, treated, & released.
167	110922HEP9001	8/14/2011	2 YOM	Tucson, AZ	The 2 year old male victim was diagnosed with a foot strain. The victim was playing in his room. His mother is not sure exactly how the tv and dresser fell over but she thinks he may have tried to climb up on the dresser to get to the tv. The end result was both the tv and dresser fell over and when the victim's mother ran into the room she found the tv still on the victim's foot. The dresser was lying on the floor. The victim was taken to the er where he was treated and released.
168	110922HEP9008	8/14/2011	6 YOF	Staten Island, NY	Patient is a 6 year old female who was in her bedroom where a tv sat on a dresser. The patient opened the dresser drawers to climb up to the tv which caused the dresser to tilt over & the tv fall off. The tv hit the patient's left foot causing a laceration & sprain to her left foot. The child was taken to the er, examined, & released.
169	110826HEP9002	8/17/2011	8 YOF	Ft.worth, TX	Patient is an 8 year old female who was watching tv in her bedroom while sitting on a chair. The patient wanted to be closer to the tv so she opened the dresser drawers to rest her feet on the drawers which caused the tv & chest to fall over & hit her face as it fell. Patient was taken to the er, treated, & released.
170	110901HEP9007	8/24/2011	3 YOF	Waynesboro, PA	Patient is a 3 year old female who was in her sister's bedroom where a tv sat on a dresser. The patient climbed the open drawers of the dresser to turn off the tv. Both the tv & dresser fell over & the tv hit the patient's head as it fell causing a contusion. Patient was taken to the er, examined, & released.

171	110915HEP9006	8/24/2011	3 YOM	Brooklyn, NY	The 3 year old male victim was diagnosed with a contusion to the shoulder. The victim was climbing up the dresser drawers where the tv sits. His climbing caused the dresser to tip over. Both the dresser and the tv fell over. The dresser hit the victim on the shoulder. The victim's mother took him from under the dresser and called 911. The victim was taken by ambulance to the er where he was treated and released.
172	11190009A	8/28/2011	F	Unknown	This dresser is very wobbly on carpet. I have it in my daughter's bedroom. When you open a drawer, it wobble as if it will tip over. I am afraid it will tip over and fall on top of her. It is not safe to be used on a carpeted floor.
173	110930HEP9005	9/2/2011	3 YOF	Ft Lewis, WA	The 3 year old female victim was diagnosed with a head injury. The victim and her 5 year old brother were climbing up the dresser drawers to start the dvd player on the tv. The victim's brother jumped off. That caused the tv and dvd player to fall over. The dresser also fell over and when it did, it hit the victim on the head. The victim was taken to the er where she was given / treated (3 stitches) and released.
174	110930HEP9010	9/11/2011	2 YOF	Aurora, CO	The 2 year old female victim was diagnosed with a fractured head. The victim and her 19 month old brother pulled all the drawers out of the dresser the tv was on. They stacked them to climb up to get to the tv. The dresser and the tv fell over, hitting her head. The brother's leg cast kept it from hitting her any harder. The victim's mother pulled her out from under the tv while the father was lifting the tv. As soon as the victim was out from under the tv, she passed out. The mother called 911. The victim was taken to the er by ambulance where she was treated and admitted for 3 nights. The victim is still under follow up care but is expected to make a full recovery.
175	120105HEP9013	9/12/2011	2 YOF	Saginaw, TX	The 2 year old female victim was diagnosed with a fractured skull. The victim was climbing on her dresser when it fell forward and the 26 inch tv, that was on the dresser, slid forward and fell off the dresser, hitting the victim on the head. The victim was still

					under the tv when her parents got to her. The victim's mother called 911. The victim was taken by ambulance to the er where she was treated and admitted.
176	X1420144A	9/26/2011	4 YOM	NJ	4 YOM was injured in a dresser and TV tip over incident. He was at home when the dresser and TV became imbalanced and fell onto his head. He suffered a traumatic brain injury and was hospitalized with multiple skull fractures. He later underwent rehabilitation.
177	111028HEP9008	10/19/2011	23 MOM	Fort Worth, TX	The 23 month old male victim was diagnosed with a bruise on his head. The victim was watching tv in his bedroom when he decided to climb on the dresser where the tv and dvr were located. His mother feels he was attempting to reach either the tv or the dvr. His climbing on the dresser caused it to tilt over and the dresser, tv and dvr all fell, brushing the victim's head. He was taken to the er where he was treated and released.
178	111114HEP9008	10/20/2011	3 YOF	Everett, WA	The 3 year old female victim was diagnosed with a head injury. The victim was sitting on the floor watching tv. The victim's cousin had taken the drawers out of the dresser the tv was on. The 5 year old cousin climbed up onto the dresser and the dresser tipped over causing both the dresser and the tv to fall, with the tv hitting the victim on the head. The victim was taken to the er where she was treated and released.
179	111103HEP9002	10/25/2011	3 YOM	Bronx, NY	Patient is a 3 year old male who was in his bedroom where a tv sat on a dresser with drawers. The patient opened the dresser drawers to climb up to the tv which caused both the tv & dresser to fall over. The tv hit the patient in the head/ear causing lacerations. The patient was taken to the er, but left before seen.

180	X11B0164A	11/1/2011	7 YOF	Memphis, TN	<p>The Tipping Point: Unsecured television can cause grave danger to children.</p> <p>A mother's life changed in an instant when she discovered her then 7-year-old daughter unconscious and bleeding from the ear after she was crushed beneath the TV in her bedroom.</p> <p>The child had pulled out all the drawers from her dresser, and stood on the bottom drawer to get a pair of socks. Her weight brought down the 27-inch- TV sitting on top of the dresser.</p> <p>"That's the only thing I remember," she said.</p> <p>An ambulance rushed her tthe hospital, where she stayed in an induced coma for the next three weeks as experts treated her for serious head trauma.</p>
181	111114HEP9003	11/2/2011	2 YOM	Philadelphia, PA	<p>The 2 year old male victim was diagnosed with a head injury.</p> <p>The victim was climbing up on the dresser drawers to get to the tv. That caused both the tv and the dresser to fall over. The tv hit the victim on the head. The victim's mother took him to the er where he was treated and released.</p>
182	111114HEP9001	11/3/2011	2 YOM	St. Louis, MO	<p>The 2 year old male victim was diagnosed with a hematoma to the face. The victim used the drawers of a dresser to climb up onto thje dresser and turn the 34 inch tv on. The victim was climbing down when he fell off the dresser and the tv and the dresser fell on him. The victim was taken to the er where he was treated and released.</p>
183	111114HEP9009	11/4/2011	21 MOM	Tucson, AZ	<p>The 21 month old male victim was diagnosed with a contusion to the foot. The victim climbed up on a dresser using the drawers. He was attempting to get to a bookcase (used as a room divider) where the 29 inch tv was. He fell forward, hitting the bookcase. That caused the tv to fall forward, hitting the victim on the left foot. The victim was taken to the er where he was treateted and released.</p>

184	111114HEP9010	11/4/2011	5 YOF	Tucson, AZ	The 5 year old female victim was diagnosed with a head injury. The victim was climbing up on her dresser to get to the tv. That caused both the dresser and the 27 inch tv to tip and fall on her. The victim's mother said the dresser was on her legs and the tv was on her head when she got to her. The victim's mother called 911. The victim was taken by ambulance to the er where she was treated and released.
185	111118HEP9006	11/7/2011	2 YOM	Yeadon, PA	Patient is a 2 year old male who was in his bedroom where a flat screen tv sat on a dresser. The patient opened the dresser drawer to climb up to the tv which caused the tv & dresser to fall over. The child was hit on the head with the tv & pinned under the tv. The mother lifted the tv off of him. The mother called 911 & the patient was admitted overnight.
186	111128HEP9005	11/8/2011	8 YOF	Brooklyn, NY	The 8 year old female victim was diagnosed with a contusion to the head. The victim, and her 7 year old niece were playing in the victim's bedroom. The victim pulled all the drawers out of the dresser where the tv sat. They were playing in front of the tv. The drawers being out caused the dresser to tip and the tv fell off the dresser, hitting the victim on the head. The victim was taken to the er where she was treated and released.
187	111202HEP9008	11/10/2011	4 YOF	Lewis Mcchord, WA	The 4 year old female victim was diagnosed with an injury to the lower leg. The victim was climbing on a dresser to get a shirt that had been on top of the tv. The 27 inch tv, which was on the dresser, tipped and fell off the dresser while she was climbing on it. The tv landed on her leg. The victim was taken to the er where she was treated and released.
188	I11B0357A 151116CBB2121	11/11/2011	4 YOF	Shelby Twp, MI	A 4 year old girl and her mother were in a bedroom placing clean clothes in an armoire. The girl placed both hands in the open, bottom drawer and pushed down. Suddenly the armoire fell forward and landed at a 45 degree angle on the bed. The bed suspended the armoire above the girl as she remained in the gap created underneath. She escaped injury. The father called the manufacturer and received a wall anchor kit. When the armoire

					was purchased in 2006, a wall anchor kit was not provided.
189	111128HEP9003	11/18/2011	3 YOM	Douglasville, GA	Patient is a 3 year old male who was in his bedroom where a tv sits on a dresser. The patient opened the dresser drawers to climb up to the tv which caused both the tv & dresser to fall over. The tv hit the patient's head as it was falling. The patient was taken to the er, treated, & released.
190	111202HEP9009	11/26/2011	2 YOF	Byers, CO	The 2 year old female victim was diagnosed with a head injury. The victim was climbing up on her dresser to get to the 25 inch tv, which was on top of the dresser, to turn it on. Her climbing on the dresser caused it to tip over and both the dresser and the tv fell on the victim. The dresser had to be removed from on top of the victim. The victim was taken to the er where she was examined and released.
191	111208HEP9009	11/27/2011	3 YOF	Henderson, NV	The 3 year old female victim was diagnosed with a head injury. The victim, and her 4 year old friend, were both climbing on the dresser that the tv was on. Their climbing caused the dresser to tip over and both the dresser and the tv fell over onto the floor. The victim was hit on the head by the 13 inch tv. The dresser also fell on her. She was under the dresser when she was found. The victim's friend was not injured. She jumped off towards the side as it was falling. The victim was taken to the er where she was treated and released.
192	111216HEP9001	12/2/2011	2 YOM	Columbus, OH	The 2 year old male victim was diagnosed with a fractured lower leg. The victim was climbing on the dresser where the tv was located. The victim's mother was telling him to get down as he fell backward, the tv and dresser both fell. The victim's mother had to remove the 19 inch tv from his leg. The victim did not cry and seemed fine. The victim took a two hour nap and when he woke up told his mother he was hurting and could not move his

					leg. The victim was taken to the er where he was treated and released.
193	I11C0463A	12/9/2011	4 YOF 57 YOF	Travelers Rest, SC	I purchased a chest and it has fallen over 3 times. The first time it fell on my 4 year old granddaughter, the only thing that saved her from injury is that it hit another piece of furniture in her room and kept it from going all the way to the floor. She was able to crawl out from under the chest. The second time it fell over I was putting clothes away in the drawers and caught it and was able to push it back up. The third time I pulled the chest away from the wall to sweep behind it, the drawers came open and it tipped and fell and again it hit the bed and the entertainment center, so it kept it from hitting the floor. I called and complained to the manufacturer and was told that there had been complaints of this happening and that it had been fixed and they would send a service representative out to the house to look at the chest.
194	X1230742C	1/1/2012	Unknown	Omaha, NE	A toddler was admitted to the hospital after a dresser toppled over. The injuries were not life-threatening.
195	120131HEP9013	1/14/2012	4 YOM	Tracy, CA	The four year old male victim sustained a fractured head. The victim went to tell his father dinner was ready. Neither his mother nor his father know exactly what happened when the victim went to get his father. The victim's mother advised that the victim went into the master bedroom. There was a tv on top of the dresser. She is not sure why or how but the tv and the dresser both fell over with the tv hitting the victim on the head and landing on top of the victim. When the victim's mother found him the tv was still on top of him. The victim was taken to the er where he was treated and admitted.

196	120131HEP9010	1/17/2012	4 YOF	Springville, UT	The 4 year old female victim was diagnosed with a face contusion. The victim was opening her brother's dresser drawer to climb up to the tv that was on top of the dresser. That caused the dresser to tip over and both the tv and the dresser fell forward. The tv brushed the victim on the face when it fell off the dresser. The victim ran to her mother. Her mother put an ice pack on her face and gave her medication, prior to taking her to the hospital. The victim was taken to the er where she was treated and released.
197	120224HEP9008	1/24/2012	2 YOF	Arvada, CO	The 2 year old female victim sustained a fractured head. The victim was in her bedroom watching tv with an older brother. The tv was on top of a dresser. The victim pulled the dresser drawers out. That caused the dresser and tv to tip over and fall. The tv hit the victim on the head. The victim was taken to the er where she was treated and held overnight for observation.
198	X1220423A X1220805A X1230188A X1230687A 120209HNE1005	2/8/2012	2 YOF	Chicago, IL	A 2 year old female suffered a large bump and an abrasion on her forehead after a television and dresser fell on her as she attempted to climb on the dresser. She was transported to hospital via ambulance in stable but guarded condition.
199	120402HEP9023	2/12/2012	2 YOM	New Kensington, PA	The 2 year old male victim sustained a laceration to his right hand. The victim was visiting his father. They were watching tv in the bedroom. The victim's mother advised that she thinks the victim attempted to climb up on the dresser where the tv was, she isn't sure why. As he was climbing the dresser and the tv both fell over, with the tv hitting and cutting the victim's right hand. The victim's father called 911. The victim was taken by ambulance to the er where he was treated and admitted.

200	120326HEP9014	2/13/2012	3 YOF	Everett, WA	The 3 year old female victim sustained a head injury. The victim was watching tv in her bedroom with her older sister. The tv was on top of the dresser. The victim's mother thinks the victim was attempting to climb on the dresser and that caused the dresser to tip and the tv slid off, hitting the victim on the head. When the victim's father got to her, the tv was still on top of her. The victim was taken to the er where she was treated and released.
201	120305HEP9006	2/18/2012	6 YOM	Columbus, OH	Patient is a 6 year old male who was in his sister's bedroom where a tv sat on a dresser. The patient climbed up the dresser to get an item on the top of the dresser which caused the tv & dresser to fall over. The tv hit him in the forehead causing a cut required 20 stitches. 911 was called & the patient was taken to the er, treated, & released.
202	120305HEP9011	2/19/2012	19 MOM	Philadelphia, PA	Patient is a 19 month old male who was in his parent's bedroom where a tv sat on a dresser. The child opened the dresser drawer to climb to the tv which caused the tv & dresser to fall over. The child was pinned under the tv & injured his head & hand. The patient was taken to the er, examined, & released.
203	X1221021A 120223HNE1013	2/21/2012	3 YOM	Deland, FL	The mother was cleaning up her bedroom with the assistance of her three year old and seven year old. She left the room for less than a minute when her three year old climbed the dresser by pulling out a drawer. When the unit fell over on him, the television fell on his head and the dresser on his torso. He was still in critical but stable condition at the time of this report.
204	120305HEP9001	2/28/2012	2 YOF	Denham Spring, LA	The 2 year old female victim sustained a hematoma to the face. The victim was talking to her parents. The tv sits on a chest that has drawers. She was trying to open one of the drawers (it was stuck) and was pulling on it. As she pulled on the stuck drawer the tv and the chest tipped and fell over. The tv hit the victim in the face. The tv was still on the victim when her mother got to her. The victim was taken by ambulance to the er where she was treated and released.

205	120413HEP9005	3/2/2012	21 MOM	Braddock Hills, PA	THE 21 month old male victim sustained a head injury. The victim was playing in his parent's bedroom. His mother advised that he tried to climb up on the dresser, she has no idea why. His climbing on the dresser caused it to tip and the TV that was on top fell off. As the TV fell it hit the victim on the head. The victim was taken to the ER where he was examined, treated and admitted.
206	120316HEP9006	3/2/2012	8 YOF	St. Louis, MO	Patient is an 8 year old female who was in the bedroom with her brother where a tv sat on a dresser. The brother opened the dresser drawer to climb up the tv which caused the tv & dresser to fall over. The tv hit the patient in the forehead causing an abrasion. The patient was taken to the er, treated, & released.
207	120316HEP9017	3/3/2012	6 YOM	Tucson, AZ	The 6 year old male victim sustained a mild head injury. The victim was in his room watching tv with a friend. The tv was on top of a dresser. The victim and his friend decided to climb up on the dresser using the drawers as steps. Their weight caused the dresser to tip over with the tv falling off the dresser and brushing the victim's head. The victim went to get his father, who called 911. The victim was taken by ambulance to the er where he was treated and released.
208	120326HEP9001	3/4/2012	4 YOM	Urbana, IL	Patient is a 4 year old male who was in his bedroom where a tv sat on a dresser. The patient opened the dresser drawer to climb up to the tv, which caused the tv & dresser to fall over. The patient was pinned under the dresser. The patient had a shoulder & ear contusion. The patient was taken to the er, treated, & released.
209	X1230291A	3/4/2012	21 MOM	South Akron, OH	The consumer heard crash & scream of her 21 month old son. she found him on floor with a dresser & TV set on top of him. top of dresser was pinching his legs up to his knees. TV, which had set atop of dresser, covered him from his thighs to his neck. he suffered bump on his head.

210	120316HEP9021	3/5/2012	8 YOM	Chillicothe, IL	The 8 year old male victim sustained a head and ankle injury. The victim was watching tv in his room. His mother was in the kitchen. She heard a crash and ran into his room. She found him with the dresser on his leg and the tv on the floor. The victim's mother said she thinks he was climbing on the dresser to either change the station or adjust the volume on the tv. The tv was on top of the dresser. When the dresser fell over the tv also fell over and hit the victim on the head. When the victim told his mother the tv hit his head she took him to the er where he was treated and released.
211	H1230105A	3/8/2012	3 YOF	Arlington Heights, IL	The consumer says if multiple drawers are open at once, the dresser will tip forward. He says there is not enough weight in the back to keep it balanced. The unit fell on his child, but they were able to pull her out right away. The consumer is concerned because the dresser was totally empty at the time of the incident, and couldn't imagine how it would be if there were clothes inside. The consumer contacted the store, who said they don't take anything back but was advised that he should call back tomorrow to speak with a manager.
212	120326HEP9012	3/11/2012	3 YOF	Burlington, NC	Patient is a 3 year old female who was in her parent's bedroom where a tv sat on a dresser. The patient opened the dresser drawers to climb up to the tv, which caused the tv & dresser to fall over. The patient's lower body was pinned under the dresser & the tv hit her head. The patient was taken right away to the er & she was examined & released.
213	120326HEP9002	3/12/2012	2 YOF	Grove City, OH	Patient is a 2 year old female who opened the dresser drawer to climb up to the tv. Both the tv & dresser fell over & the tv grazed her head as it fell & she was pinned under the tv. The child was taken to the er, examined & held for observation for a few hours, & released.

214	120326HEP9003	3/13/2012	5 YOM	Atlantic City, NJ	Patient is a 5 year old male who was in his bedroom where a tv sat on a dresser. The patient was suppose to get his pajamas out of the dresser so he opened 2 dresser drawers & climbed up. Both the dresser & tv fell over & his lower body was pinned under the dresser, & his head, under the tv. Patient was taken to the er, examined, & released.
215	120413HEP9002	3/20/2012	3 YOF	Columbus, OH	The patient is a 3 year old female who was in the bedroom with her 5 & 7 year old brothers. The 5 year old brother opened the dresser drawers to climb up to the tv which caused both the tv & dresser to fall over. The patient was pinned under the dresser. The patient had an abrasion on her head. The tv hit her 7 year old brother in the face causing a laceration. Both children were taken to the er, treated, & released.
216	120413HEP9003	3/20/2012	7 YOM	Columbus, OH	Patient is a 7 year old male who was in the bedroom with his 3 year sister & 5 year old brother. The 5 year old brother opened the dresser drawers to climb up to the tv which caused both the tv & dresser to fall over. The tv hit the patient's face causing a laceration which required stitches. The sister was pinned under the tv. Both children were taken to the er, treated, & released.
217	120413HEP9016	3/22/2012	2 YOM	San Angelo, TX	The 2 year old male victim sustained a contusion to his head when, while playing in his room, he accidentally bumped into the dresser where the tv was located. That caused both the dresser and the tv to fall over and bump the victim on the head. When the victim's mother ran into the victim's room he was crying and the tv and the dresser were on the floor. Since the victim had a bump on his head she felt he was hit by both the dresser and the tv. The victim was taken to the er where he was treated and released.

218	I1260304A	4/13/2012	3 YOF	Hudson, OH	We purchased the dresser for my three-year-old daughter. It toppled over onto her. Fortunately, the mirror caught on the rails on her bed so she was not crushed, but if the rails had been down she would have been seriously injured or even killed. I am not sure if she climbed up onto it or pulled out all the drawers, which caused it to topple but afterwards my husband and I noticed that when the drawers are pulled out the unit is very tippy. Since this was sold as children's furniture, it seems like it would be a good idea to use slides like those found in a filing cabinet that only allow one drawer at a time to be pulled out. My husband has since attached the dresser to the wall so this won't happen again, but I wanted to report this so other parents don't have a much sadder outcome than we did.
219	120420HEP9004	4/14/2012	4 YOM	Poplar Bluff, MO	The 4 year old male victim sustained a minor head injury. The victim and his family were visiting friends. The victim was lying on a cot in the bedroom and his mother was in the kitchen. The victim's mother thinks he attempted to climb on the dresser to reach the tv or the dvd player attached to the tv. His climbing caused the dresser to tip over and the tv fell scraping the victim's head as it fell. The tv and dvd player landed on the cot. The victim's mother ran into the bedroom and found the victim lying on the cot crying. The tv/dvd player were also on the cot next to him. The victim was taken by ambulance to the er where he was treated and released.
220	120525HEP9015	5/2/2012	3 YOF	Ft. Worth, TX	Patient is a 3 year old female who was playing in her bedroom where a tv sat on 4 drawer dresser. The patient opened the dresser drawers to climb up to the tv which caused the tv & dresser to fall over. The patient was pinned under the dresser & had scratches on her head. 911 was called & she was taken to the er, examined, & released.
221	I1250532A	5/26/2012	33 YOF	Eden Prairie, MN	The dresser fell toppled over when the top drawer was opened. The safety strap that was included to attach the dresser to the wall does not work if the top drawer has the most allotted weight.

222	120612HEP2365	6/11/2012	5 YOF	Greensboro, NC	Patient is a 5 year old female who was in her bedroom where a tv sat on a dresser. The patient opened the dresser drawer & was jumping on it which caused both the tv & dresser to fall over. The patient was pinned under the tv & hit on her head by the tv. The patient was taken to the er, treated, & released.
223	X1260372A X1260377A	6/13/2012	67 YOF	Portland, OR	A 67 YOF was trapped for nearly 4 days after a dresser fell on top of her. Neighbors reported after they realized they hadn't seen her for a while. Deputies forced their way into the woman's home and found her pinned underneath the dresser. She had injuries to both legs. The woman was in and out of consciousness after not having any food or water for days.
224	I1260383A 120620CNE0017	6/14/2012	55 YOF	Brookline, MA	A newly purchased children's five-drawer chest tipped over and fell onto a 55-year-old female while she was retrieving clothing items from the chest. One of the drawers was broken as a result of the incident but the victim was not injured. An anti-tip device was subsequently installed on the product.
225	120629HEP9007	6/20/2012	4 YOM	Dublin, OH	Patient is a 4 year old male who was in his bedroom where a tv sat on a dresser. The patient opened the dresser drawers to climb up & get something out of the top drawer which caused both the tv & dresser to fall over. The patient was pinned under the dresser & the tv hit his face. The patient's hip & chest area were bruised. The patient was taken to the er, treated, & released.
226	120629HEP9018	6/20/2012	19 MOF	Aurora, CO	The 19 month old female victim sustained an internal organ injury to her head. The victim was in her bedroom with her older (4 years old) sister. They were watching a dvd on the tv which was on top of her dresser. The victim wanted to change the dvd so she climbed on the dresser drawers to get to the tv. Her weight on the drawers caused the dresser to tip over and both the dresser and the tv fell over. The tv hit the victim's head and the dresser hit her on the wrist. The victim was taken to the er where she was treated and released.

227	120713HEP9008	6/26/2012	4 YOF	Jacksonville, AL	Patient is a 4 year old female who was in her mother's bedroom where a tv sits on a dresser. The patient opened the dresser drawers to climb up to the tv which caused both the tv & dresser to fall over. The patient was pinned under the dresser. The patient was taken to the er, examined, & released. The patient had sprained her left wrist.
228	120723HEP9006	7/4/2012	6 YOF	Tacoma, WA	The 6 year old female victim sustained a laceration to her forehead ,when she opened up all the drawers on her dresser and the weight caused the dresser to tip over and the tv to fall and strike her in the head. She was taken to the hospital where she was treated and released.
229	120723HEP9007	7/12/2012	3 YOF	Tucson, AZ	The 3 year old female victim sustained a laceration to her forehead, when her cousin bumped into the dresser the tv was sitting on and it fell striking her in the head. She was taken by ambulance to the hospital where she was treated and released.
230	120727HEP9008	7/19/2012	4 YOF	Ventrees, LA	The 4 year old female victim sustained a skull fracture when her tv fell off her dresser and landed on her. The victim pulled the drawers out of her dresser and was climbing on the first drawer when the dresser tipped over causing the tv to fall. She was taken by ambulance to the hospital where she was treated and admitted for 4 days.
231	120912HEP9005	7/25/2012	2 YOF	Lincoln Park, MI	Patient is a 2 year old female who was in her bedroom where a tv sat on a dresser. The patient opened several of the dresser drawers to climb up to the tv which caused both to fall over. The child was pinned under the tv & the tv hit her head. The mother lifted the tv off of her. The child was taken to the er, treated, & released.
232	120912HEP9046	8/2/2012	2 YOM	Ft. Worth, TX	Patient is a 2 year old male who was watching a movie on his tv that sat on a dresser. The patient was sitting in his little chair. The mother heard a crash & found the child pinned under the tv & still sitting in his chair. The dresser had also fallen. The child was taken to the er, treated, & released. The child had fractured his finger.

233	120912HEP9040	8/5/2012	3 YOF	Grand Prairie, TX	Patient is a 3 year old female who was in the bedroom with her brother where a tv sat on a dresser. The brother opened the bottom dresser drawer & they were both jumping in the drawer which caused both the tv & dresser to fall over. The tv hit the patient's head which caused her nose to bleed. 911 was called & the child was taken to the er & admitted. Patient had a hairline fracture.
234	120921HEP9001	8/5/2012	20 MOF	Russleton, PA	The 20 month old female victim sustained a contusion to her head, when she tried to pull herself up onto the dresser to turn on the tv and the dresser and tv fell on her. Her mom took her to the er where she was treated and released.
235	120912HEP9052	8/8/2012	18 MOM	Tacoma, WA	The 18 month old male victim sustained a bump to his head and bruise to his face, when he pulled on the dresser the tv was sitting on and it fell hitting him in the head. His mother took him to the er where he was treated and released.
236	I1290132A	8/10/2012	3 YOF	Orinda, CA	Our 3-year-old daughter opened all 4 drawers of her dresser at the same time which caused it to tip over towards her. Luckily, she ran out of the way in time. The bottom drawer's rail bent and the back board cracked as a result.
237	120912HEP9059	8/24/2012	5 YOF	Vallejo, CA	The 5 year old female victim sustained a bump to her head, laceration to her mouth and contusion to her leg, when she pulled on the cords attached to the tv and the tv and dresser fell over and hit the victim. She was taken to the er where she was treated and released.

238	X1280881A 120827CNE1290	8/27/2012	3 YOM	Haverhill, MA	A 3-year-old male was hospitalized after an lcd television tipped over and landed on him. The television was located on a small bureau and when he climbed up on open drawers of the bureau it and the tv tipped over. The boy's mother found him unresponsive on the floor, pinned underneath the tv, and then lifted it up off of him. He was transported by ambulance to the hospital where he was treated for external lacerations and diagnosed with having two blood clots in his head as a result of this incident. The victim was released from the hospital after one overnight because he responded well to treatment.
239	120921HEP9002	8/27/2012	3 YOF	Philadelphia, PA	The 3 year old female victim sustained a bump to her head when she was climbing on her dresser to change the dvd and the tv fell off and hit her in the head. Her mother took her to the er where she was treated and released.
240	120912HEP9031	9/3/2012	2 YOF	New Haven, CT	Patient is a 2 year old female who was in her bedroom where a tv was sitting on a dresser. The mother believes the child opened the dresser drawers to climb up to the tv which caused both the tv & dresser to fall over. The child's legs were pinned under the tv. The child was taken to the er, treated, & released.
241	120912HEP9048	9/3/2012	2 YOM	Oakland, CA	The 2 year old male victim sustained a bump to his head and bloody lip and nose, when he climbed on the dresser the tv was sitting on and the dresser and tv fell on him. His mother took him to the er where he was treated and released.
242	120921HEP9015	9/5/2012	3 YOF	Fort Worth, TX	The 3 year old female victim sustained a bump to her head, when she pulled the drawers open in her dresser, it tipped and the tv fell off and hit her in the head. Her mother took her to the er where she was treated and released.
243	120921HEP9005	9/15/2012	3 YOF	New Haven, CT	Patient is a 3 year old female who was in the bedroom with her 2 sisters where a tv sat on a dresser. The dresser was empty when the child opened the top dresser drawer which caused both the tv & dresser to fall over. The tv hit the patient's head & she was pinned under the tv. The sister lifted the tv off the patient & 911 was called. The patient was taken to the er & admitted for a

					skull fracture.
244	121004HEP9003	9/27/2012	7 YOF	Brooklyn, NY	The 7 year old female victim sustained a busted lip and scrapes to her knee when she was climbing on her dresser and her dresser and the television fell and hit her. She was taken to the er where she was treated and released.
245	121017HEP9001	10/10/2012	2 YOM	Saint Louis, MO	The 2 year old male victim sustained a laceration to his arm when he climbed on his dresser causing the tv to fall off and hit him. He was taken by ambulance to the er where he was treated and released.
246	121029HEP9010	10/11/2012	3 YOF	Shirley, NY	Patient is a 3 year old female who was in her bedroom where a tv sat on a dresser. The child opened the dresser drawers to climb up to the tv which caused both the tv & dresser to fall over. The tv hit the patient's knee as it was falling causing a contusion. As a precaution, the child was taken to the er, treated, & released.
247	121029HEP9011	10/15/2012	3 YOF	Tacoma, WA	The 3 year old female victim sustained a fracture to her heel, when she shook the dresser the tv was on and the tv fell on her foot. Her mother took her to the er where she was treated and released.
248	121102HEP9003	10/25/2012	6 YOM	East St Louis, IL	Patient is a 6 year old male who was in his bedroom where a tv sat on a dresser. The patient was looking for his pajamas & opened all of the dresser drawers which caused the tv & dresser to fall over & the patient was pinned under the dresser. Ems was called & the child was taken to the er, treated, & released.
249	I12B0201A 121114CNE0004	11/3/2012	35 YOM	Grosse Pointe, MI	A new, 35" high, children's dresser tipped over when all 9 drawers were opened. No injury occurred when it fell on the 35 year old father. The family is concerned with the safety of this low profile dresser because the tip over restraint kit was very easy to overlook and the delivery staff made no mention of the kit. Furthermore, they understood that the tip over restraints

					were only an extra precaution and were not necessary since they did not plan to place any heavy objects on top of or inside the dresser.
250	121130HEP9037	11/26/2012	3 YOF	Wewoka, OK	The 3 year old female victim sustained a sore knee when she climbed on the dresser and the tv and dresser fell on her leg. She was taken to the er where she was treated and released.
251	121217HEP9011	11/26/2012	4 YOF	Denver, CO	The four year old female victim sustained a hematoma to her forehead and a laceration to the back of her head. She stepped in the drawer of her dresser and it tipped over and the tv fell and hit her in the head and she fell back and hit the back of her head on something that was on the floor. Her mother took her to the er where she was treated and released.
252	121217HEP9009	11/27/2012	6 YOM	Philadelphia, PA	The 6 year old male victim sustained a contusion to his wrist when he opened the drawer of his dresser, stepped in it and the dresser tipped over and the tv fell on his hand. He was taken to the er where he was treated and released.
253	121217HEP9002	12/4/2012	7 YOF	Lincoln Park, MI	Patient is a 7 year old female who was in the bedroom where a tv sat on a dresser. The patient opened the last drawer of the dresser & sat on it which caused both the tv & dresser to fall over. The tv hit the child in the foot as it fell. The child was taken to the er, treated, & released.
254	I12C0310A	12/15/2012	4 YOM	Amherst, NY	The dresser fell over and fortunately was stopped by a set of bunk beds, but trapped my sons head in between the drawers! The plastic tip support bracket broke. I have now replaced it with a medal one. I fear that if the dresser had been put at another location in the room and the bed had not stopped it my son would have been seriously hurt.  We were only using the bottom three draws so far, with nothing on top

					<p>We are using this dresser for my older son, but when it happened it imprisoned my younger son who was playing cars on the floor. It took both my wife and I to free him. I knew it was a heavy dresser; it required a male friend and I both to muscle it in my house. With the tip brakes and all I thought it would never fall!</p> <p>Just think of the nightmare of what would have happened if the bed was not there, and we had filled it to the max like most parents would have.</p>
255	130111HEP9015	12/20/2012	6 YOM	Tacoma, WA	The 6 year old male victim sustained a fracture to his right pinky when he climbed on his dresser and the dresser and tv fell on him. He was taken to the er where he was treated and released.
256	130208HEP9011	1/1/2013	17 MOM	Watauga, TX	The 17 month old male victim sustained contusions and abrasions to his face, when his tv fell off his dresser after he had been climbing on it, and hit him in the face. He was taken by ambulance to the er where he was treated and released.
257	131023HEP9018	1/4/2013	3 YOM	Marysville, WA	The 3 year old male victim sustained a laceration to the bottom of his foot and bruise to his leg at home, when he stood in his dresser drawer and pulled himself up on the dresser, the dresser tipped over, drawer broke and the tv fell. His mom took him to the er where he was treated and released.
258	130412HEP9001	1/7/2013	5 YOF	Urbana, IL	Patient is a 5 year old female who was in her bedroom where a tv sat on a dresser. The patient opened the dresser's drawers to climb up the tv which caused both the dresser & tv to fall over. The child was pinned under the tv & she had a laceration to her forehead. The ems was called & she was taken to the er, treated, & released.
259	130207HEP9005	1/25/2013	2 YOM	St. Charles, MO	The 2 year old male victim sustained a bump to his head when he was climbing on the dresser and both the tv and dresser fell and he hit his head on the tv. He was taken to the er where he was treated and released.

260	130208HEP9012	1/28/2013	2 YOM	Fort Worth, TX	The 2 year old male victim sustained a fracture to his arm when he was climbing on the furniture and the tv and furniture fell on him. He was taken to the er where he was treated and released.
261	130208HEP9017	2/4/2013	6 YOF	Hastings, NE	The 6 year old female victim sustained a laceration to her scalp, when her and her sister opened all of the drawers on the dresser and it tipped over causing the tv to fall and hit her in the head. Her mother took her to the er where she was treated and released.
262	H1320145A 130220CNE0001 (Terminated IDI)	2/9/2013	15 MOM	Yonkers, NY	The caller stated that her 15 month old son opened the bottom drawer of the dresser and sat in it. The dresser tipped over and all of the drawers fell out but her spouse caught the unit before it fell on him. The caller stated that the 5 drawer dresser was not anchored to the wall but feels that it might not have been built with strong stability to maintain the weight of her son, who is 37 lbs. She feels that it is unsafe and should be reported.
263	130228HEP9001	2/24/2013	2 YOM	Columbus, OH	Patient is a 2 year old male who was in the bedroom with his 3 year old sister where a tv sat on a dresser. The sister opened the dresser drawers to climb up to the tv which caused both the tv & dresser to fall over. The tv hit the side of the patient's head causing a laceration. The patient was taken to the er, treated, & released.
264	130228HEP9002	2/24/2013	3 YOF	Columbus, OH	Patient is a 3 year old female who was in the bedroom with her brother where a tv sits on a dresser. The patient opened the dresser drawers to climb up to the tv which caused both the tv & dresser to fall over. The tv may have hit the child's lower arm because she was crying & said it hurt. The patient was taken to the er, treated, & released.
265	I1320606A	2/25/2013	3 YOM	Aliso Viejo, CA	We purchased a chest of drawers. THIS PRODUCT IS NOT SAFE FOR CHILDREN. Once it is filled with clothes it is very easy to tip over on top of the child, CRUSHING THE CHILD. The store refused to exchange this product for a safer one that they have in store.

					PARENTS SHOULD NOT BUY THIS PRODUCT FOR THEIR CHILDREN.
266	X1321318B	<i>Date Received</i> 2/27/2013	2 YOM	Unknown	A 2 1/2 year old boy narrowly escaped being crushed under his wood dresser as he tried to reach a stuffed bear on top of it. The parent heard a loud crash. The dresser landed 6 inches from the child.
267	130308HEP9005	3/1/2013	5 YOM	San Angelo, TX	The 5 year old male victim sustained a hematoma to the head when he climbed on the dresser and the tv and dresser fell on him. He was taken to the er where he was treated and released.
268	X1330299A	3/4/2013	18 MOM 18 MOF	German Township, OH	Twin siblings injured by falling TV and dresser . An 18-month-old boy and his twin sister were airlifted to a children's hospital after a 32-inch television and dresser fell on top of them at an apartment complex in the morning.
269	Mfr/Retailer Rpt 141118CBB1130	3/25/2013	3 YOM	Abingdon, MD	Three and eight year old brothers were playing in the eight year old child's bedroom when the three year old child attempted to climb on top of a four drawer dresser that was located against a wall in the bedroom. As the child was trying to climb up the front of the dresser, the dresser fell forward landing on top of the child and trapping him underneath it. The child's parents were able to remove the dresser off of the child without incident. As a precaution, the child's parents took him to the local emergency room for evaluation. Hospital staff performed a physical evaluation and took radiological views (x-rays). The child sustained no temporary or permanent injuries and was released from the hospital that same day.
270	130404HEP9001	3/26/2013	8 YOM	Columbus, OH	Patient is a 8 year old male who was in his bedroom where a tv sat on dresser. The patient had opened the dresser drawers & then sat on the floor to put on his shoes. Suddenly the tv & dresser fell over & the tv hit him on the head. The patient was taken to the er, treated, & held for observation.

271	130412HEP9007	3/31/2013	6 YOF	Arlington, TX	Patient is a 6 year old female who was in her bedroom where a tv sat on a 2 drawer dresser. The patient opened the dresser drawers which caused the tv & dresser to fall over & she was pinned under them. Ems was called & the child was taken to the er, treated, & released.
272	130404HEP9002	3/31/2013	2 YOF	Columbus, OH	Patient is a 2 year old female who was in the living room where a tv sat on a drof leaf table. Next to the table there was a coffee table. The patient climbed on the coffee table to reach the table & change the tv channel. While doing this, both the tv & dresser fell over with the tv hitting the patient on the face causing a laceration. Ems was called & the child was taken to the er, treated, & released.
273	X1360391A	4/4/2013	2 YOM	Wetumpka, AL	My two year old son was putting his clothes in his drawer when our extremely heavy chest came falling down on top of him, causing injury (including bleeding). My husband, who is a paramedic, ran into the room where we were and took necessary care of his injury. Thankfully it was not as severe as it could have been but my husband said it could have killed him, broken his neck, or another body part. My son was not climbing in the drawers at the time of the incident nor was he at all touching the top drawer (which he is unable to reach anyway). He was only helping me put clothes in his drawers as I handed it to him. The back of the drawers, which appears to me to be made out of a cardboard-like substance, detached from the back of these drawers at the time of the incident. I immediately checked into which brand this product was and assumed it must be a recalled product to tip over this easily. I was shocked to learn that it is not recalled. I would like to insist that this product should most definitely be recalled.

274	130412HEP9008	4/7/2013	3 YOM	Marysville, WA	The 3 year old male victim sustained a contusion to his back when he climbed up his dresser and it tipped over causing the tv to fall off and hit him. His mother took him to the er where he was treated and released.
275	130516HEP9008	4/20/2013	6 YOF	Fort Worth, TX	The 6 year old female victim sustained a contusion to her foot when she climbed on her dresser and the tv fell off and hit her foot. She was taken to the er where she was treated and released.
276	I1350109A	5/6/2013	3 YOF	Ballston Spa, NY	We own a kids bedroom set and when my 3 year old opened all 6 drawers to its max (in a search for the perfect pajamas), the entire dresser tipped over pinning her between her dresser and her bed. It was extremely heavy. I replicated what happened and sure enough, when you open all of the drawers at once, the whole thing topples over. I checked to see if the dresser was level and it's perfectly level, so it doesn't naturally lean forward. I contacted the manufacturer yesterday and they essentially told me they didn't have anything to fix that and to just not open all 6 drawers. I asked that the matter be taken up with the owner and the problem evaluated in their warehouse for future shipments. This is an 80 lb dresser which toppled over onto a 35 lb 3 year old. She was very lucky that she didn't have her legs broken. Everything that was fragile that was on top of her dresser was completely broken. There are now several scratches on the surface of the dresser from the incident.
277	130826HEP9002	5/7/2013	2 YOM	Grove City, OH	The 2 year old male victim sustained a bruised and swollen face at home, when he tried to climb on top of his dresser and it fell over on him and the 16 inch tv fell off and hit him. His mother took him to the er where he was treated and released.
278	130524HEP9004	5/12/2013	9 YOM	Ft. Worth, TX	Patient is a 9 year old male who was in his bedroom where a tv sat on a dresser. The patient's younger brother opened the bottom dresser drawer & sat in it & then the patient did the same. Both the tv & dresser fell over. The patient fractured his finger & was taken to the er where he was treated & released.

279	130613HEP9008	5/26/2013	4 YOM	Ft. Worth, TX	Patient is a 4 year old male & he was at another person's home. The patient & a 4 year old female were in the bedroom where a tv sat on a dresser. The female opened the drawers of the chest to climb up to the tv which caused both the tv & dresser to fall over. The patient tried to stop the tv from falling & the tv hit his lower arm & fractured it. The patient was taken to the er, treated, & released.
280	130613HEP9009	5/26/2013	4 YOF	Ft. Worth, TX	Patient is a 4 year old female who was in her bedroom where a tv sat on a dresser. The patient opened the dresser drawers to climb up to the tv which caused both the tv & dresser to fall over. The tv hit the child's head & she was pinned under the dresser. The patient was taken to the er, treated, & released.
281	130531HEP9004	5/27/2013	3 YOF	Everett, WA	The 3 year old female victim sustained a concussion, when she climbed on her dresser and it tipped over and the tv fell on her head. Her mother took her to the er where she was treated and released.
282	130709HEP9003	6/1/2013	2 YOM	Mebane, NC	Patient is a 2 year old male who was in the bedroom with his 32 month old nephew where a tv sat on a dresser. Both children opened the dresser's drawers to climb up to the tv. Both the tv & dresser fell over & they were both pinned under it. The tv hit the patient in the face causing a contusion. The patient was taken to the er, treated, & released.
283	X1360392A	6/10/2013	3 YOF	Syracuse, NY	Child in critical condition after TV falls on her. A 3-year-old girl was in critical condition after a television fell on her Monday morning at a home. The old, tube-design television was on a heavy dresser, and somehow the weight shifted and both items landed on the child.
284	130627HEP9002	6/17/2013	2 YOF	Columbus, OH	Patient is a 2 year old female who was in the living room where a tv sat on a dresser. The patient opened the dresser drawers to climb up to the tv which caused the tv & dresser to fall over. The tv hit the child's head. Ems was called & the child was taken to the er, examined, & released.

285	130709HEP9004	7/2/2013	3 YOM	New Haven, CT	3 year old male had climbed on top of a dresser to change a dvd connected to a television. The dresser and television tipped over and he was found with the television on top of him. He was treated and released from the emergency room.
286	130712HEP9034	7/3/2013	2 YOF	Fairview Heights, IL	The 2 year old female victim sustained a bump to her head, when she was climbing on her dresser and her dresser and 26 inch flat screen tv fell on her. She was taken to the er where she was treated and released.
287	130712HEP9036	7/3/2013	3 YOM	Greensboro, NC	Patient is a 3 year old male who was playing with his 2 male cousins in the bedroom where a tv sat on a dresser. The mother believes one of the children may have bumped the dresser which caused the tv to fall off & the dresser partially went over. The tv hit the child's hit causing bruising. The patient was taken to the er, treated, & released.
288	130718HEP9005	7/6/2013	2 YOM	Aurora, CO	The 2 year old male victim sustained a bruised and sprained foot when he pulled open the dresser drawer, the dresser tipped forward and the 13 inch tv fell on his foot. He was taken to the er where he was treated and released.
289	130812HEP9001	8/2/2013	12 MOM	St. Louis, MO	Patient is a 12 month old male who was in his bedroom with his playmate. A tv sat on the dresser & both children opened the bottom drawer of the dresser which caused the tv & dresser to fall over. The tv hit the side of the child's face causing an abrasion & the child's legs were pinned under the dresser. The patient was taken to the er, treated, & released.
290	130903HEP9001	8/15/2013	4 YOF	Champaign, IL	The 4 year old female victim sustained a contusion to her head at home, when she yanked her dresser drawer open and the dresser and 32 inch tv fell and hit her in the head. Her mom took her to the er where she was treated and released.
291	130826HEP9006	8/16/2013	7 YOM	Greensboro, SC	Patient is a 7 year old male who was in his bedroom where a tv sat on a dresser. The patient opened the dresser drawer & the tv & dresser fell over. The tv hit the patient's head causing a contusion. The patient was taken to the er, treated, & released.

292	130903HEP9007	8/23/2013	2 YOF	Upper Marlboro, MD	The 2 year old female victim sustained a bump to her forehead at home, when she was climbing her dresser drawers to get on top of her dresser and the dresser tipped over and the 20 inch flat screen tv fell off and hit her in the forehead. Her mom took her to the er where she was treated and released.
293	130919HEP9001	9/2/2013	3 YOF	Dougalsville, GA	Patient is a 3 year old female who was in her bedroom where a tv sat on a dresser. The patient opened the dresser drawers to climb up which caused the tv & dresser to fall over. The child's lower legs were pinned under the dresser. The child had a contusion to her nose & foot. The child was taken to the er, treated, & released.
294	131023HEP9024	9/8/2013	3 YOM	Aurora, CO	The 3 year old male victim sustained a fracture to his skull and bruise above his eye at home, when he was climbing up his dresser to get something on top of the tv and the dresser tipped over and 20 inch tv fell and hit him in the face. His mom took him to the er where he was treated and admitted.
295	130919HEP9005	9/12/2013	5 YOF	Baton Rouge, LA	The 5 year old female victim sustained a sprain to her foot at home, when she climbed on her dresser, it tipped over and the 27 inch tv fell on her foot. Her mom took her to the er where she was treated and released.
296	131023HEP9022	10/4/2013	2 YOF	Lakewood, WA	The 2 year old female victim sustained an abrasion to her back at home, when she was messing with the 32 inch tv and the dresser tipped over and the tv fell off and hit her in the back. She was taken to the er where she was treated and released.
297	131107HEP9002	11/1/2013	3 YOM	Ft Myers, FL	Patient is a 3 year old male who was in his bedroom where a tv sat on a dresser. The patient opened the dresser drawers to climb up to the tv which caused the tv to fall over & he was pinned under it. The dresser was tilted but did not go over . Ems was called & the child was taken to the er, treated, & released. The child had leg pain.

298	I13B0050A 131107CCC3126	11/2/2013	3 YOM	San Antonio, TX	A dresser with an attached mirror tipped over and fell to the floor when the three year-old male victim opened the top two drawers and reached to retrieve something out of one of the drawers. His 32 year old father who was standing next to the victim quickly moved him up against the bed and out of the way of the dresser. The mirror separated from the dresser and hit the father's arm and then hit the bed frame shattering the mirror. No injuries were sustained by the victim or his father.
299	131121HEP9006	11/7/2013	3 YOM	Aurora, CO	The 3 year old male victim sustained a laceration to his forehead at home, when he was climbing up his dresser and the tv fell on him. He was taken to the er where he was treated and released.
300	I13B0215A	11/11/2013	5 YOF	Saint Cloud, FL	My five year old daughter was looking in her 5 drawer chest and opened one drawer at a time, but never shut the drawers while looking. While all five drawers were opened at the same time the dresser chest fell on top of her. Luckily, she only suffered some bruising to her arm and we got her checked out at the ER and they said she is ok. I then tested what my daughter did and opened all five drawers and the dresser fell. I also tried this without clothing and opened all five drawers at the same time and the dresser fell.
301	131203HEP9014	11/19/2013	7 YOM	Douglasville, GA	Patient is a 7 year old male who was in his bedroom where a tv sat on a dresser. The patient was climbing on his dresser which caused both the dresser & tv to fall over. The tv hit the patient on the head & he was pinned under the dresser. As a precaution, the patient was taken to the er, treated, & released.
302	131203HEP9018	11/27/2013	2 YOF	Douglasville, GA	Patient is a 2 year old female who was in her bedroom where a tv sits on a dresser. The patient opened the dresser drawers to climb up to the tv which caused the tv & dresser to fall over. The tv hit her foot causing a contusion. The patient was taken to the er, treated, & released.

303	131213HEP9008	12/1/2013	3 YOF	Aurora, CO	The 3 year old female victim sustained a fracture to her collarbone at home, when she opened the top drawer of her dad's dresser and it tipped over and the corner of the dresser hit her. She was taken to the er where she was treated and released.
304	131213HEP9002	12/5/2013	5 YOF	Columbus, OH	The 5 year old female victim sustained a laceration to her head at home, when she was climbing on the dresser to turn the tv on and the dresser tipped over and the tv fell off and hit her in the head. She was taken to the er where she was treated and released.
305	131230HEP9001	12/14/2013	21 MOF	Ft Worth, TX	A 21 month old female patient was injured while in her brother's bedroom with her brother & niece. A flat screen tv sat on a dresser. The brother & niece were opening the dresser's drawers & climbing which caused both the tv & dresser to fall over. The patient was pinned under the tv & she fractured her clavicle. The patient was taken to the er, treated & released.
306	131230HEP9006	12/17/2013	23 MOM	Marysville, WA	The 23 month old male victim sustained redness to his chest and side of his head at home, when he pulled the bottom drawer out of the dresser and got in it and the dresser and 23 inch tv/dvd combo fell on him. He was taken to the er where he was treated and released.
307	140103HEP9002	12/19/2013	4 YOF	Groveport, OH	Patient is a 4 year old female & she & her niece were in the bedroom where a tv sat on a dresser. The dresser drawers were not in the dresser & the two girls were climbing up the dresser which caused both the tv & dresser to fall over. The patient was hit on the side of the face by the tv causing a contusion. The patient was taken to the er, treated, & released.
308	140110HEP9005	12/31/2013	4 YOM	Lanham, PA	The 4 year old male victim sustained a contusion to his head, arm and chest at home when he was climbing up the dresser and the drawer fell out of the dresser and the 20 inch tv fell off the dresser and landed on him. He was taken to the er where he was treated and released.

309	140110HEP9007	12/31/2013	2 YOM	Claremont, NH	Patient is a 2 year old male who was in the bedroom with his sister where a tv sat on a bureau. The sister climbed from the bed to the bureau which caused both the tv & bureau to fall over. The patient's lower leg was pinned under the tv & he got a contusion to his foot. The patient was taken to the er, treated, & released.
310	140123HEP9007	1/7/2014	4 YOF	Atlantic City, NJ	Patient is a 4 year old female who was in her bedroom where a tv sat on a 6 drawer dresser. The patient used the handles of the dresser to climb up the dresser which caused both the tv & dresser to fall over. The patient's mattress is on the floor & she fell backwards onto the mattress & her upper body was pinned under the tv while her lower body under the dresser. Ems was called & the child was taken to the er, transferred & admitted to the hospital. The patient had 2 skull fractures.
311	140130HEP9003	1/16/2014	3 YOF	Claremont, NH	Patient is a 3 year old female who was in her bedroom where a tv sat on a 3 drawer dresser. The patient opened the dresser drawers to climb up to the tv which caused both the tv & dresser to fall over. The tv lacerated the child's face & she was taken to the er. The er treated & released her.
312	I1420189A 140305CCC1448	1/25/2014	3 YOF	Nyc, NY	A double dresser that was secured to a bedroom wall with safety straps unexpectedly broke and toppled over onto the bedroom floor nearly injuring a three year old preschooler. The preschooler, who was not injured, was attempting to open one of the dresser drawers. The preschooler was not playing on top of the double dresser. The double dresser has since been secured to the wall studs by a private contractor. No property damage reported.
313	140502HEP9001	2/3/2014	4 YOM	Bellaire, OH	Patient is a 4 year old male who was in his bedroom where a tv sat on a 6 drawer dresser. The patient opened the dresser drawers to climb up which caused both the tv & dresser to fall over. The patient was pinned under the dresser. The patient had a few contusions on his lower trunk & was taken to the er where he was treated & released.

314	140218HEP9001	2/7/2014	6 YOF	Columbus, OH	The 6 year old female victim sustained a concussion at home, when she was climbing on her dresser and it fell over and the 40 inch tube tv that was on the dresser hit her in the head. She was taken to the er where she was treated and released.
315	140218HEP9003	2/8/2014	5 YOF	Columbus, OH	Patient is a 5 year old female who was in her bedroom where a tv sat on a dresser. The patient climbed the dresser to get a balloon which caused both the tv & dresser to fall over. The tv hit her ankle causing a contusion. The patient was taken to the er, treated, & released.
316	140226HEP9006	2/9/2014	2 YOF	Cape Coral, FL	Patient is a 2 year old female who was in her bedroom playing & a tv sat on a dresser. Both the dresser & tv were bolted to the wall. The patient opened the dresser drawers to climb up to the tv which caused the tv & dresser to fall over. The child was pinned under the dresser & the tv hit her clavicle & fractured it. The patient was taken to the er, treated, & released.
317	150306HEP9006	3/1/2014	3 YOM	Wewoka, OK	A 3 year old male was struck on the side of the head by a tube television that had tipped over. It was on a dresser that was not sturdy at 5 1/2 feet off of the floor. The child was climbing up the dresser when they both tipped over. Mother was in the same room. The child was found sitting on the floor with the television beside him. His twin was still asleep in another room. He sustained a hematoma to head. He was treated and released from the emergency room.
318	I1570326A 150827CBB1866	3/10/2014	2 YOF	Chevy Chase, MD	A 4-drawer chest tipped over when a 2-year-old girl opened three of the chest's drawers. The child's mother was in the room at the time and she caught the chest before it fell on the child.
319	X1440290A	3/15/2014	2 YOM	Jacksonville, FL	A 2 year old boy was climbed on a dresser, he pulled a heavy TV & the dresser down on top of him. TV was on his head, the dresser was on his body & he became unresponsive. He was taken to the hospital in critical condition but later he was listed in stable condition.

320	140515HEP9012	3/17/2014	2 YOM	Fort Worth, TX	The 2 year old male victim sustained a skull fracture at home, when he climbed in his dresser drawers and was pulling on a towel sitting underneath of the tv and the 32 inch tube tv fell off the dresser on top of him. He was taken to the er where he was treated and admitted.
321	140410HEP9009	3/27/2014	3 YOF	Lakewood, CO	The 3 year old female victim sustained a mild concussion at home, when she climbed up the dresser to change the channel on the tv and the the dresser fell over and the 13 inch tube tv hit her in the head. She was taken to the er where she was treated and released.
322	X1440440A	4/6/2014	3 YOM	Surprise, AZ	A 3-year-old boy broke his leg when a dresser fell on him at home. The boy was hospitalized where he is in stable condition.
323	140508HEP9003	4/9/2014	5 YOF	Adams, MA	Patient is a 5 year old female who was with her brother in the bedroom where a tv sat on a dresser. The patient opened the bottom drawer of the dresser & stepped on it which caused both the tv & dresser to fall over. Both children were pinned under the dresser & tv. The patient had a laceration on her head. The patient was taken to the er, treated, & released.
324	140508HEP9004	4/9/2014	2 YOM	Adam, MA	Patient is a 2 year old male who was with his sister in the bedroom where a tv sat on a dresser. The sister opened the bottom dresser drawer & stood on it which caused both the tv & dresser to fall over. Both children were pinned under the tv & dresser. The patient had a slight fracture to his foot. The patient was taken to the er, treated, & released.
325	140626HEP9008	4/9/2014	19 MOF	Rhome, TX	The 19 month old female victim sustained a bruise and swelling to her head, fractured skull, bleeding from ear and severe whiplash at home, when she was climbing on her brother's dresser to get a toy and the dresser and 32 inch tube tv fell over on her. She was taken by ambulance to the er where she was treated and admitted.

326	140417HEP9006	4/12/2014	4 YOF	Marysville, WA	The 4 year old female victim sustained a contusion to her head at home, when she was climbing on the dresser in her sister's room and it tipped over and the 30-inch tube tv fell off and hit her in the head. She was taken to the er where she was treated and released.
327	140425HEP9005	4/15/2014	2 YOM	Forth Worth, TX	The 2 year old male victim sustained a fracture to his upper leg at home, when he was opening the drawers of his mother's dresser and the dresser tipped over and tube tv fell off the dresser onto the victim's leg. His mother took him to the er where he was treated and released.
328	I1580276A 151223CCC2206	4/15/2014	3 YOM	Minnetonka, MN	A 3 yom sustained a fractured femur (upper leg) when a free-standing, non-anchored dresser tipped over atop of him at his residence. The victim received emergency medical care but has since recovered from his injuries.
329	140522HEP9005	4/30/2014	3 YOM	Aurora, CO	The 3 year old male victim sustained a busted lip and bruises to his face at home, when he pulled the dresser drawers out and was playing in one of the drawers when the dresser tipped over and the 46 inch tube tv fell off and hit him and landed on his 19-month old brother. He was taken to the er where he was treated and released.
330	140515HEP9010	5/1/2014	5 YOF	Fort Worth, TX	The 5 year old female victim sustained a fracture to her arm at home, when her brother tried to pick up the 32 inch tv off the dresser and the dresser tipped forward and the tv fell off on her arm. She was taken to the er where she was treated and released.

331	H1460044A	6/6/2014	11 YOF	Buckeye, AZ	<p>Caller is reporting a child's 6 foot tall armoire that she has had no problems with until when she heard crashing noises coming from her 11yr old daughter's bedroom.</p> <p>When she entered her daughter's room she saw the daughter's armoire lying forward with the door open and caught on the poster bed.</p> <p>There were items all over the floor that had been on top of the armoire.</p> <p>The child had been pulling on the top shelf when the armoire began falling forward.</p> <p>She said that she had tried to hold it but then it became too heavy but as it fell forward the door of the unit came open and caught on the post of her bed keeping it from falling on her.</p> <p>The caller is reporting this product as an unsafe product because she didn't think it would fall due to the weight but she now has discovered that if the shelves are pulled the armoire rocks forward.</p> <p>There are no injuries to be reported</p> <p>.</p>
332	140703HEP9003	6/10/2014	2 YOF	Peoria, IL	<p>The 2 year old female victim sustained a swollen bruised ankle and bruised back at home, when she climbed in the bottom drawer of her dresser to get to the top drawer and it fell over on her and the 27 inch tube tv fell off onto her ankle. She was taken to the er where she was treated and released.</p>
333	140703HEP9001	6/23/2014	3 YOM	Festus, MO	<p>The 3 year old male victim sustained bumps and bruises to his head at home, when he was climbing on his dresser and it fell over on him and the 32 inch tube tv fell off onto his head. He was taken to the er where he was treated and released.</p>
334	140703HEP9005	6/25/2014	21 MOM	Columbus, OH	<p>The 21 month old male victim sustained a concussion and contusions to his head at home, when he was climbing in his dresser and it fell over on him and the 19 inch tube tv fell off the dresser and hit his head. He was taken to the er where he was treated and released.</p>

335	X1471036A 150901CFE0002 (Terminated IDI)	6/27/2014	F	New Castle, DE	Greetings, I am writing this to report a very dangerous large heavy piece of furniture. The furniture is a defective design of top heavy and front heavy dresser with the wrong type of pedestal footing. Every time I open my drawers to sort storage items it had completely fell forward on top of me. Hurting and injuring me. The store does not want to admit it does that. But it is very dangerous it could if not already in similar incidents cause extreme injury or even death to someone. This dresser could crush anything under it. It is very heavy and impossible to lift up. If I hadn't had a storage container in front when it fell I may have suffered broken bones instead of strained ones. A child or pet c
336	X1480014A 140804CBB1817	7/1/2014	4 YOM	Penn Valley, PA	A 4 year-old boy is believed to have opened multiple drawers of the 5-drawer dresser when it tipped over and pinned him at the foot of his bed. The top of the dresser came to rest on the bed but the drawers of the unit opened and were on top of the boy when he was found by his mother. The boy was taken to the hospital to be examined as a precaution but he was not injured as a result of the incident. The family purchased the dresser online and stated the delivery company did not leave any assembly instruction or wall mounting hardware with it. The dresser was delivered fully assembled.
337	140730HEP9004	7/17/2014	2 YOM	Tucson, AZ	Patient is a 2 year old male who was in the bedroom where a flat screen tv sat on a dresser. The tv was cable wired to the wall & dresser. The patient climbed up the dresser & pulled on the cable causing both the tv & dresser to fall over. The dresser partially fell onto the bed. The dresser hit his mouth & broke his baby teeth. The tv hit him under the eye & he had to have stitches. The patient was taken to the er, treated, & released.

338	I14A0195A 141027CBB3065	10/11/2014	3 YOF	Seattle, WA	A six drawer dresser with a small lamp and ten children's books located on top tipped over on a three year old female while she was getting dressed alone in her room. The three year old child was able to hold the dresser up with her hands at a 45 degree angle, preventing it from completely tipping over. The child's mother responded immediately and pushed the dresser back into place. While pushing the dresser back, the child's mother noted all six drawers were open to a certain degree, and the lamp and all of the books had slid into the top right drawer. The child did not sustain any injuries and she was not able to explain to her mother how the dresser tipped over.
339	141023HEP9001	10/19/2014	2 YOF	New Haven, CT	33 month old female sustained a laceration to her face between her eyes when a television tipped over on top of her. She required three stitches. She had pulled out a dresser drawer to climb up to turn on the tv that was on top of the dresser. Both tipped over. The cable box was on top of the 20 inch tv. There was a lot of blood. Within 5 minutes she was taken to the hospital where she was treated and released.
340	X14A1836A 150901CFE0001	10/24/2014	4 YOM	Hagerstown, MD	A dresser tipped over when a 4-year-old male opened the dresser's top drawer while standing on the bottom drawer. A 32 inch television fell off the dresser and the child was pinned beneath the dresser and the tv set. The child suffered a torn small intestine and a perforated large intestine during the incident. The victim was hospitalized and underwent surgery for his injuries. The victim has recovered from the incident.
341	X14A1846A 141030HWE0001	10/29/2014	18 MOM	Kansas City, MO	An 18 month old boy was injured when a three drawer dresser tipped forward allowing a 27 inch tv to fall off; landing on his head while he was playing on a bedroom floor. The child suffered lacerations to his face and was treated at a local hospital where he was admitted.
342	141113HEP9004	11/1/2014	4 YOF	Columbus, OH	Patient is a 4 year old female & her 1 year old sister was climbing on the dresser with a tv on it in the bedroom which caused the tv & dresser to fall over. The tv hit the patient's head. Ems was

					called & the child was taken to the er, treated, & released.
343	141113HEP9007	11/3/2014	3 YOM	Denver, CO	Patient is a 3 year old male who was in his bedroom where a tv sat on a dresser. The patient opened the dresser drawers to climb up the dresser which caused both the tv & dresser to fall over. The tv hit the patient's head & he was partially pinned under it. The patient was taken to the er, treated, & released.
344	X1510162A X1530834A X1531004A 150112HWE0001	11/18/2014	7 YOM	Omaha, NE	A seven year-old boy suffered injuries to his head and chest when a 32" crt television set and clothing dresser tipped over in his bedroom. A statement made to officials by the victim's father indicated the boy opened a drawer of the dresser to get his pajamas when the dresser and television tipped over and fell on him. The boy was hospitalized with a traumatic brain injury and received intensive inpatient rehabilitation therapy.
345	141204HEP9003	11/26/2014	5 YOF	South Bloomfield, OH	Patient is a 5 year old female who was in her bedroom where a tv sat on a dresser. The patient opened the dresser drawers to climb up the dresser which caused both the tv & dresser to fall over. The tv hit her on the head & she was taken to the er. The patient was treated & released.
346	150423HEP9008	2/12/2015	3 YOM	Gorman, TX	Patient is a 3 year old male who was in his bedroom where a tv sat on a 4 drawer dresser. The patient opened the dresser drawers to climb up to the tv, which caused both the tv & dresser to fall over. The tv hit the child's head & he was pinned under the dresser. Ems was called & the child was taken to the er & admitted. Patient had injured his tendons in his neck & had bleeding in his brain.
347	150313HEP9001	2/23/2015	2 YOF	Cedar Bluff, AL	Patient is a 2 year old female who was in her mother's bedroom where a tv sat on a dresser. The patient opened the dresser drawers to climb up to the tv which caused both the tv & dresser to fall over. The tv hit the patient's clavicle & fractured it. The patient was taken to the er, treated, & released.

348	150409HEP9001	3/19/2015	9 YOM	Lakewood, CO	A 9 year old male was struck in the head with a television when it tipped over at home in a bedroom. He was sitting on the bed. His younger sister had climbed up the 5 layered dresser, dangling from the top of the furniture when it tipped over. A 42 inch tube television was free standing on top of the dresser. The victim was immediately brought to the emergency room where he was treated and released.
349	I1570334A 160223CBB2389 (no document)	4/15/2015	19 MOF	Richmond Heights, MO	The drawer fell on to the consumer's 19mo daughter when she tried to open to the lowest one. A wooden comb fell out first & stuck between bedroom floor & drawer so consumer was able to pull her out on time. She sustained unspecified injury & was seen by a Medical Professional.
350	150515HEP9004	5/2/2015	6 YOF	Philadelphia, PA	A patient is a 6 year old female who was in her mother's bedroom where a tv sat on a dresser. The patient wanted an item on the top of the dresser so she opened the dresser drawers to climb up which caused both the tv & dresser to fall over. The tv hit her left hand as it fell. The next morning the child's hand was swollen so the mother took her to the er where she was treated & released.
351	150528HEP9001	<i>Estimated 5/21/2015</i>	2 YOM	Columbus, OH	31 month old male had climbed up the five foot tall dresser in the bedroom to turn on the tube television. The television and dresser both tipped over. The tv landed on the floor beside the child's head. The dresser tipped and was propped up by an opened drawer. He was immediately taken to the hospital. He was scared and would not talk for 12 hours. He was treated and released from the emergency room.
352	150604HEP9004	5/28/2015	3 YOF	Medford, NY	Patient is a 3 year old female who was in her bedroom where a tv sat on a dresser. The patient opened the dresser's drawers to climb up to the tv which caused both the tv & dresser to fall over & she was pinned under them. The patient was taken to the er, treated, & released for a contusion to her face.
353	I1580075A	6/1/2015	3 YOF	Los Angeles, CA	Consumer reported that 3 YOF was opening drawers of dresser & when she opened top drawer last, unit tip over. She was able to leap out of way before unit landed face down on floor &

					escaped injury. Unit was unsecured because it was low dresser.
354	150618HEP9004	6/3/2015	6 YOF	Capitol Heights, MD	Patient is a 6 year old female who was in her bedroom where a tv sat on a dresser. The patient opened all of the dresser drawers while looking for socks which caused the tv & dresser to fall over. The tv hit her foot causing a contusion. The patient was taken to the er, treated, & released.
355	150618HEP9003	6/10/2015	3 YOM	Columbus, OH	47 month old male was climbing a dresser in the bedroom when the dresser tipped over and the television that was freestanding on top of it fell. He was found with the dresser on top of his leg and the tv was on the floor. He was admitted to the hospital for one night. His leg was casted and he is is still under medical care for his fractured leg.
356	150626HEP9002	6/11/2015	6 YOF	Columbus, OH	Patient is a 6 year old female who was in her bedroom where a tv sat on a dresser. The patient opened all of the dresser drawers while looking for socks which caused the tv & dresser to fall over. The tv hit her foot causing a contusion. The patient was taken to the er, treated, & released.
357	Mfr/Retailer Rpt 150807CBB1816	7/1/2015	10 YOM	Tamarac, FL	A 10 year-old boy sustained bruises when a four-drawer dresser tipped over onto him. The boy was climbing the open drawers of the dresser when it tipped over. It was not anchored to the wall. The product was returned to the retail store.
358	150709HEP9006	7/2/2015	5 YOF	Bronx, NY	5 year old female was climbing up a dresser to get something out of the top drawer. She used the lower drawer as a step. The dresser tipped over and the tube television freestanding on top of it tipped over and fell to the floor. The child was found under the two dresser drawers. The victim's father heard her scream and threw the two drawers out of the way. She had a contusion to her leg where a drawer fell on top of her. She was treated and released from the emergency room.

359	I1570325A 150827CBB3902 (Terminated IDI)	7/11/2015	7 YOM	Petaluma, CA	Consumer had just put together 3-drawer dresser & heard crash. 7 YOM had opened drawers & was laying on floor in front of dresser. It had crashed down , & he was able to break its fall with his feet. The dresser was damaged from fall.
360	150814HEP9003	8/2/2015	2 YOM	Grove City, OH	Patient is a 2 year old male who was in his bedroom where a tv sat on a dresser. The patient opened the dresser drawers to climb up to the tv which caused both the tv & dresser to fall over. The patient was pinned under the tv. The child had a hairline skull fracture & a minimal hearing loss. Ems was called & the child was admitted for 3 nights.
361	150917HEP9001	9/5/2015	4 YOM	Aurora, CO	4 year old male was climbing a five foot dresser that had a flat panel television on top of it. The dresser tipped over and the the television struck the victim in the head. His mother found him standing up crying. He had blood on his head and was brought to the emergency room where he was treated and released.
362	I1590369A	9/18/2015	4 YOM	Derwood, MD	The consumer stated that her 4-YO climbed on the 3-drawer dresser and it fell forward. Most likely he opened the bottom drawer to use it as a step. He was able to jump out of the way without injury but it being a heavy piece of furniture, he could have been seriously injured.
363	I1590458A 160112CBB3310	9/27/2015	3 YOM	Phoenix, AZ	A 3yom was uninjured after an 11 drawer chest / dresser tipped over and fell onto the victim, a scooter and a mattress. The incident unit was later returned to the retailer. Retail owner discarded the incident unit per the manufacturer's instructions after the unit was returned.
364	151105HEP9003	10/17/2015	3 YOM	Columbus, OH	Patient is a 3 year old male who was with his 5 year old brother in the bedroom. The brother put the patient's toy on top of the tv which sat on a dresser. The patient opened the dresser drawers to climb up to get his toy. Both the tv & dresser fell over & the child was pinned under the tv. Ems was called & the child was taken to the hospital & admitted for surgery.

365	151112HEP9002	10/19/2015	6 YOM	Columbus, OH	Patient is a 6 year old male who was in his bedroom where a tv sat on a dresser. The patient opened the dresser drawers to climb up to the tv which caused both the tv & dresser to fall over. The tv hit the child's face causing a laceration & possible head injury. The child was taken to the er, treated, & released.
366	151112HEP9004	11/4/2015	4 YOM	Columbus, OH	4 year old male was getting clothes out of antique dresser when tube tv and dresser fell on him. Mother found him unconscious under the tv and furniture. Called 9-11 due to visible skull fractures. Traumatic brain injury & concussion sustained along with neck injuries. Admitted into the hospital for two weeks one day. In icu for one week. Rehabilitation has been and is required. Has a neck brace to wear for 3 months has continuous therapy, speech therapy.
367	151120HEP9002	11/11/2015	8 YOM	Philadelphia, PA	8 year old male found on bed under a 19 inch tube television that had been sitting on top of his dresser. He had opened all the drawers causing the tv and dresser to tilt forward. The chord caught on the dresser and kept full weight of tv from falling onto his stomach and knees. Minor injury to knee and stomach, admitted to hospital for observation and released.
368	151120HEP9004	11/15/2015	4 YOM	Greensboro, NC	Patient is a 4 year old male who was in his bedroom where a tv sat on a dresser. The patient opened the dresser drawers to climb up to the tv which caused both the tv & dresser to fall over. The tv hit the child's left shoulder causing a contusion. The child was taken to the er, treated, & released.
369	151217HEP9001	12/4/2015	2 YOM	Columbus, OH	Patient is a 2 year old male who was in his bedroom where a tv sat on a dresser. The patient opened the bottom drawer of the dresser & stood in it which caused the tv & dresser to fall over. The tv hit the patient's head & face above the eyebrow. The patient was taken to the er, treated, & released for an internal head injury.