

CPSC and the Mattress Industry

The Latest from the CPSC

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**ISPA EXPO
Charlotte, NC
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This presentation was prepared by CPSC staff, has not been reviewed or approved by, and may not reflect the views of the Commission.

Session Overview

- Introduction
- 16 CFR part 1633 – The First Ten Years
- Lessons Learned
- Request for Information
- ISPA Tech to Tech
- Organohalogen Flame Retardants
- On the Horizon

The Commission



Acting Chairman Ann Marie Buerkle (2nd Left)

Commissioners: Robert Adler, Elliot Kaye, Marietta Robinson

CPSC Mattress Requirements

16 CFR part 1632

- Cigarette Ignition
- Mattresses and Mattress Pads
- Excludes Foundations

16 CFR part 1633

- Open-Flame Ignition
- Mattresses and Mattress Sets
- Excludes Mattress Pads

CPSIA Requirements

- Certifications
- Children's Products
 - Lead
 - Phthalates
- Tracking information

CPSC Mattress Activities

- 1973 – 16 CFR part 1632 issued
- 2001 – ANPR; Standard to Address Open Flame Ignition of Mattresses/Bedding
66 Federal Register 51886; October 11, 2001
- 2005 – ANPR; Possible Revocation or Amendment of Standard for the Flammability of Mattresses and Mattress Pads (Cigarette Ignition)
70 Federal Register 36357; June 23, 2005
- May 2006 – Interim Enforcement Policy for Mattresses Subject to 16 CFR parts 1632 and 1633
- March 2006 – Final Rule: Standard for the Flammability (Open Flame) of Mattress Sets (Effective July 2007)
71 Federal Register 13498; March 15, 2006
- November 2017 – Regulatory Flexibility Act Section 610 Review of the Standard for the Flammability (Open Flame) of Mattress Sets
81 Federal Register 91923; December 19, 2016
- February 2017 – Request for Information Regarding Mattress Materials
82 Federal Register 8923; February 1, 2017

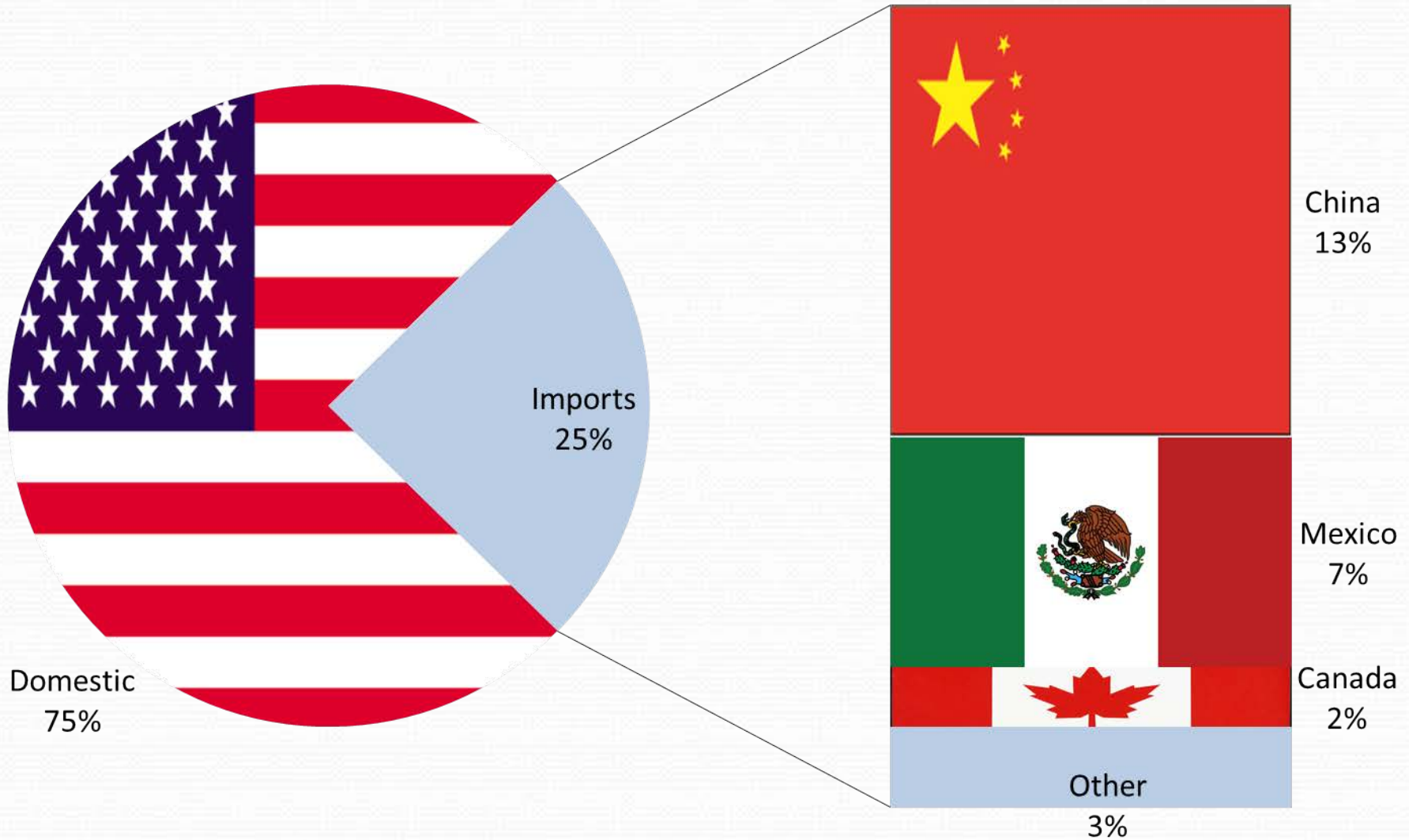
Regulatory Flexibility Act Section 610 Review of the Standard for the Flammability (Open Flame) of Mattress Sets

81 Federal Register 91923; December 19, 2016

- Small business impact review at 10-year mark
- No proposed changes
- Industry comments support 16 CFR part 1633
- Some comments on 16 CFR part 1632 out of scope, but noted
- Limited data
- Cost of materials decreased by approximately half
- No further review scheduled

Mattress Market

Mattress Market (ISPA, 2015)



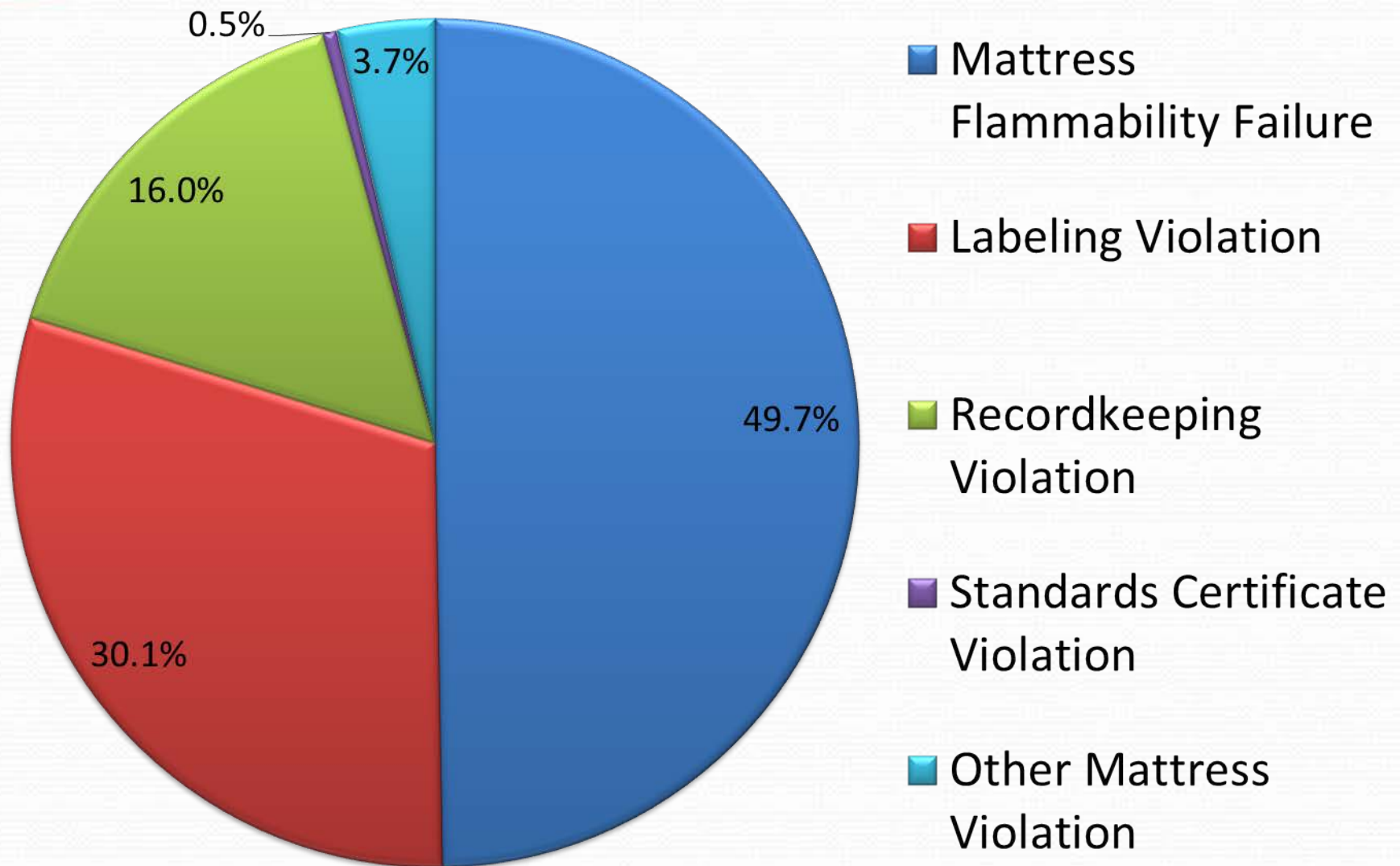
Disclaimers:

- Not a statistical sampling
- Not proportional to market share

>>>Need to meet all requirements of standard

>>>Routinely find non-compliant products

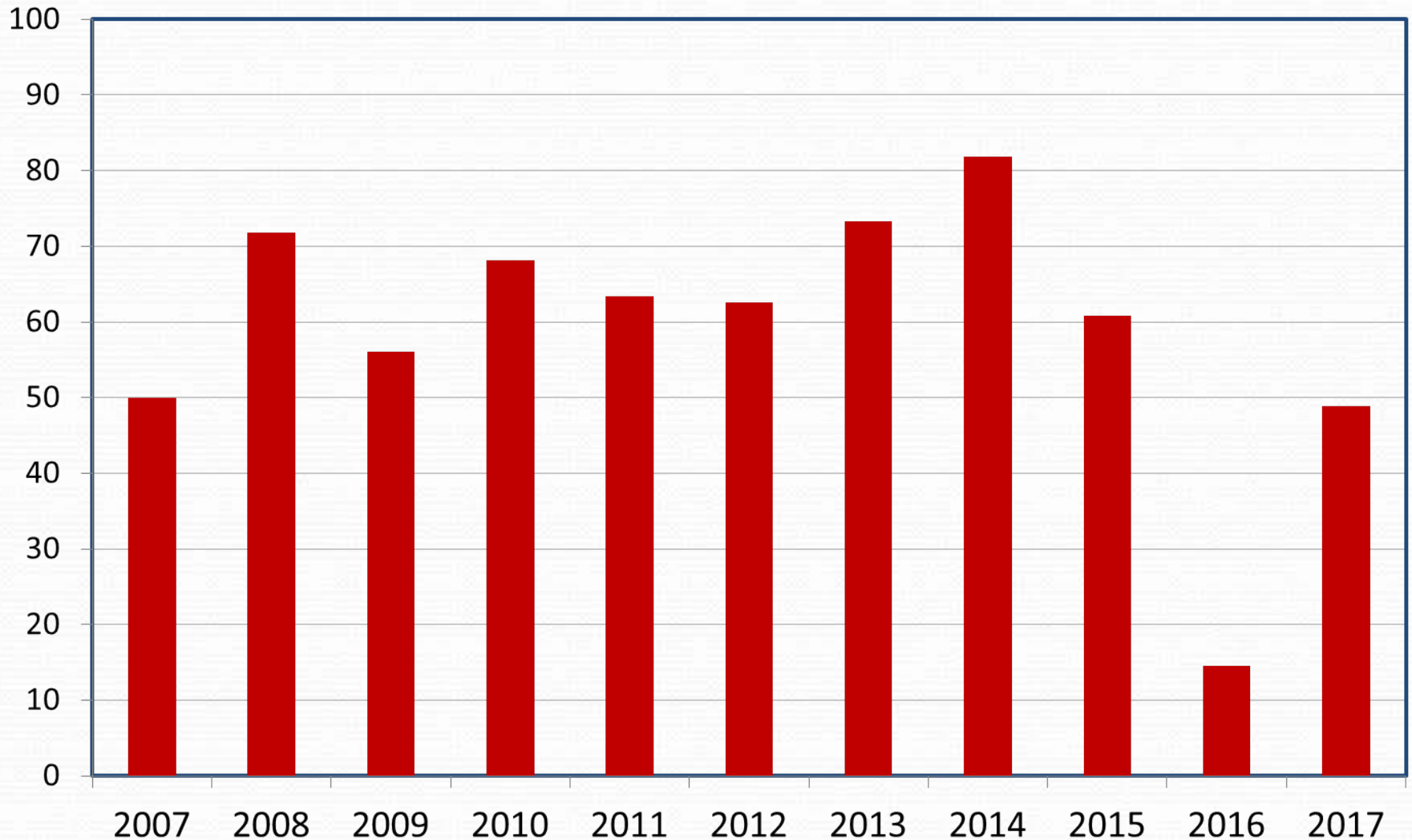
Mattress Violations, FY 08 - Present



Disclaimer: Not a statistical sampling; not proportional to market share.

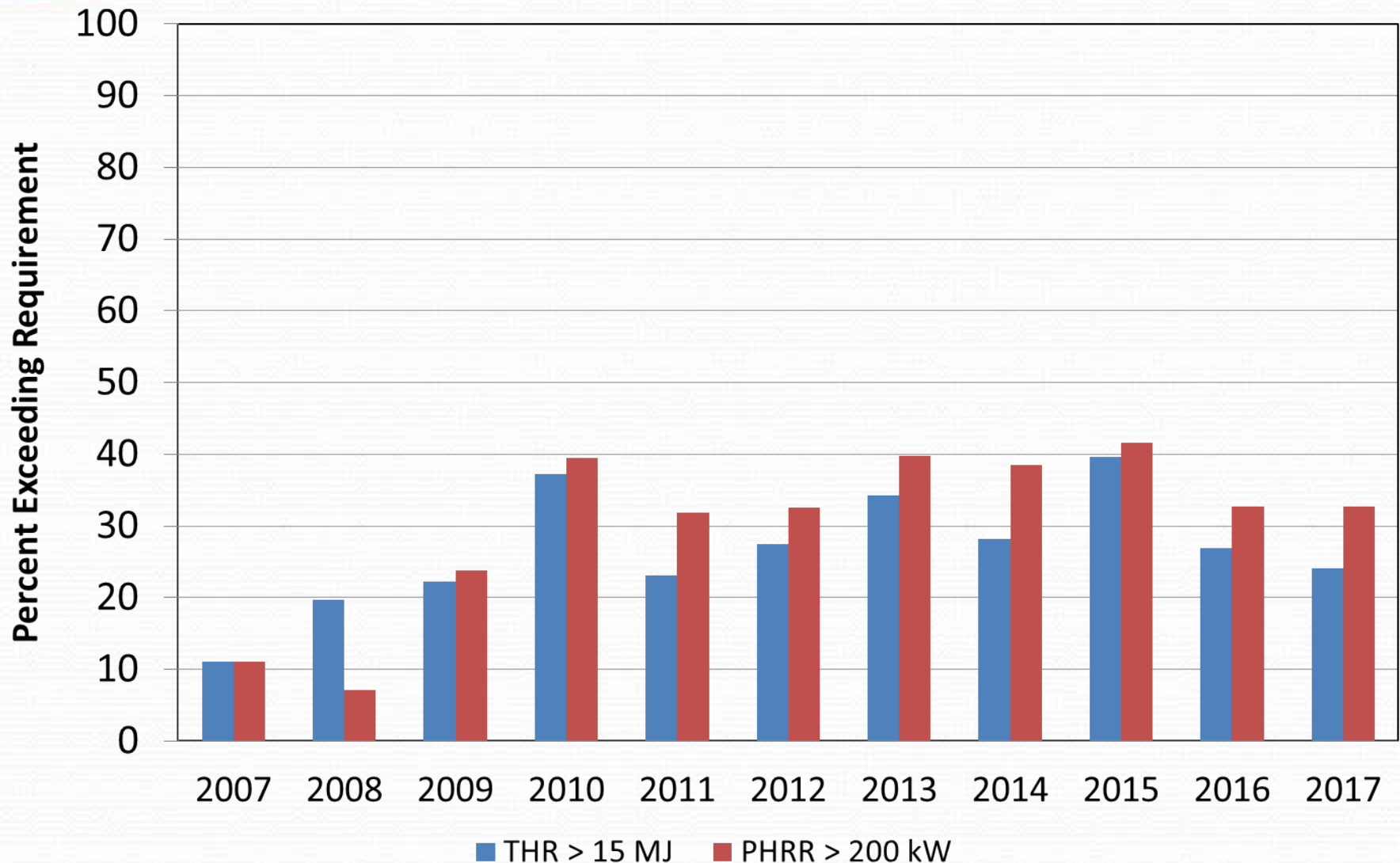
Mattress Violations, FY 08 - Present

Mattress Sample Violations, Percent



Disclaimer: Not a statistical sampling; not proportional to market share.

CPSC Laboratory Testing



Disclaimer: Not a statistical sampling; not proportional to market share.

Lessons Learned

- The following stories are inspired by real events
- No relationship or connection to any real case
- Used to illustrate lessons learned

Snooze Retires; Sells to Zeeze

- Eve Snooze retires, sells her business
- Dawn Zeeze buys firm
- Keeps same location, staff, equipment, prototype ID
- Changes thread used to stitch tape edge
- Ms. Zeeze is unaware the thread was not just decorative, but a critical element for flammability compliance.



Lessons Learned

Snooze Retires; Sells to Zeeze

- CPSC collected samples and tested.
- The mattresses failed the performance requirements of 16 CFR part 1633.

>>> *Educate staff about significance of changes in materials and/or methods of assembly.*

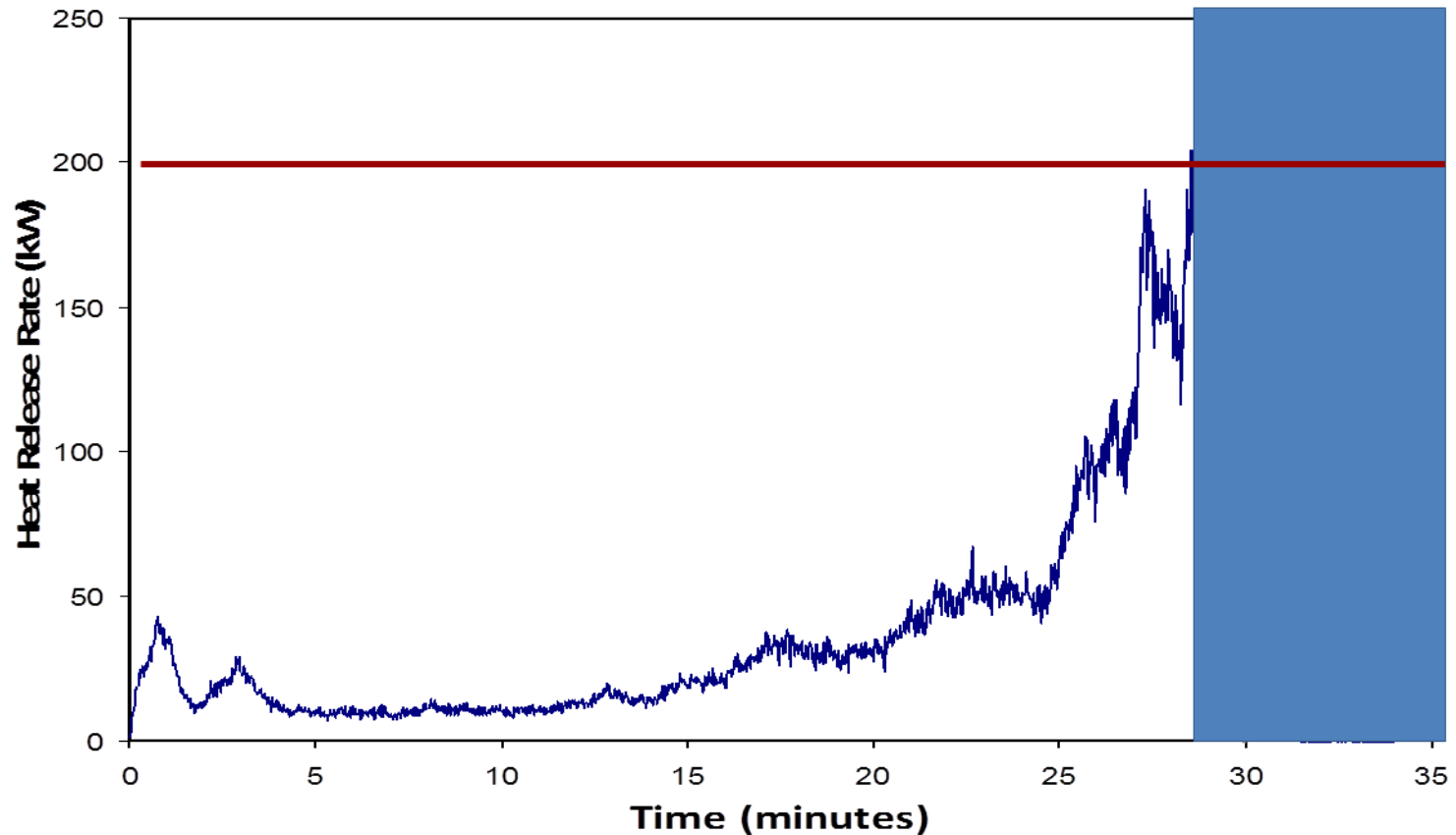


LULULabs, Inc.

- Extinguishes mattresses and stops recording data at 200 kW
- Loses valuable information for troubleshooting failures

>>> *Additional data can help troubleshoot failures.*

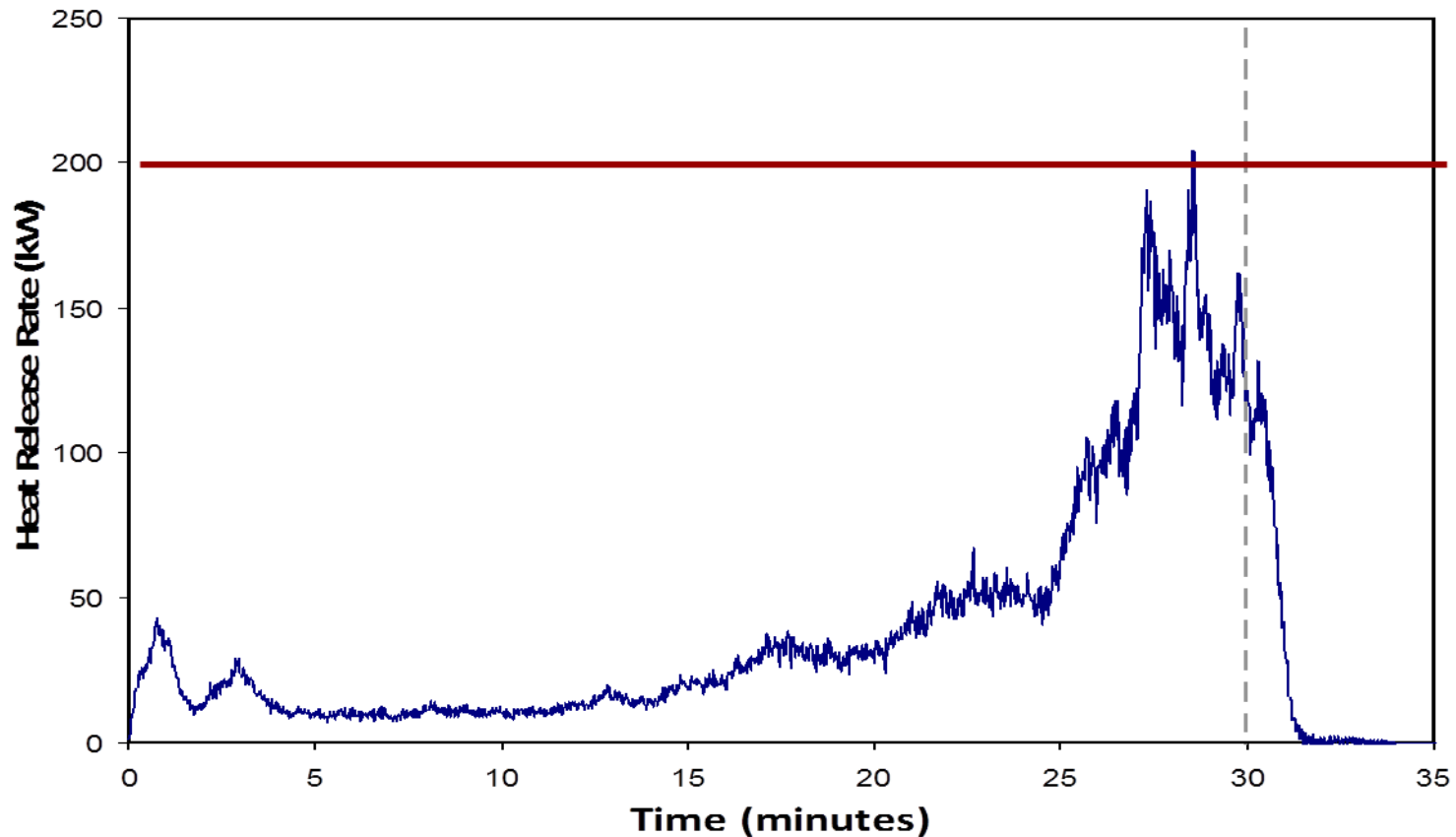
LULULabs, Inc.



- What happens after 200 kW?

Lessons Learned

LULULabs, Inc.



>>> *Additional data can help troubleshoot failures.*

Happy Industries Sleep Systems (HISS)

- HISS imports mattresses from a plant overseas.
- The manufacturer keeps detailed records of the suppliers, shipments of component materials, any component changes, and related production lots.
- The records are maintained by HISS.
- HISS does periodic testing and detects a failure.

>>> *Because of the detailed records and labeling, the importer can manage the scope of the corrective action/recall and may be able to limit the number of affected units.*

DreAmerica Corp.

- Mattress prototype is designed for use with or without a foundation
- Sends three sets to test lab to qualify the prototype
- Test lab tests as sets with foundations → Pass (x3)
- CPSC tests mattress only → Fail

>>> *The manufacturer did not fully qualify the prototype.*

>>> *Burden on manufacturer/importer to ensure appropriate testing is conducted.*

Maker of Mattresses, Inc. (MoMI)

- Successful mattress manufacturer looking to expand overseas
- Contracts with overseas manufacturer, who provides 3 production samples for testing that were built based on the domestic manufacturer's specification or build sheet



Maker of Mattresses, Inc. (MoMI)

- MoMI tests samples → Pass
- After production begins, foreign supplier changes production to save \$\$
- CPSC collects at port and tests samples → Fail
- Supplies that were changed in production changed the prototype.

>>> Robust production testing program may limit scope of corrective actions.

Request for Information

Request for Information Regarding Mattress Materials

82 Federal Register 8923; February 1, 2017

- Materials, components, and methods of assembly currently being used to comply with both standards.
- Commission elected to use Request for Information (RFI)
- May pursue survey in future
- Thank you to those who submitted comments.

Request for Information

- Ticking Substitution Procedure in the Cigarette Ignition Standard (16 CFR section 1632.6)
 - Adequate or need revision to reduce variability in the current test procedure
- Stakeholder experiences related to prototyping to meet the requirements of the Open Flame Standard (16 CFR part 1633)

ISPA Joint Technical Meeting

- CPSC staff hosted ISPA and SPSC members at 1st “Tech to Tech” meeting in December.
- All attendees agreed to continue to collaboratively discuss mattress flammability requirements at future meetings.
- Next meeting date not set

ISPA Joint Technical Meeting

- The members presented background information on the current trends in mattress materials and methods of assembly.
- Asserted consumer preference and designs for meeting the flammability requirements of 16 CFR part 1633 have made the cigarette ignition resistance requirements of 16 CFR part 1632 redundant and burdensome.
- CPSC staff invited industry members to share relevant data and present suggestions for staff to consider.

Organohalogen Flame Retardants

- Organohalogen chemicals are organic compounds that contain at least one halogen (fluorine, chlorine, bromine, or iodine) bonded to carbon.
- Organohalogen flame retardants (also referred to as *OFRs* or *halogenated flame retardants*) contain bonds between carbon and the elements bromine or chlorine.
 - Includes brominated and chlorinated phosphate ester flame retardants.

- Petition HP 15-1:

16 C.F.R. § 1051 Petition for Rulemaking to Protect Against Consumer Products Containing Additive Organohalogen Flame Retardants

- Submitted July 1, 2015

<https://www.regulations.gov/docket?D=CPSC-2015-0022>

- Petitioners:

American Academy of Pediatrics, American Medical Women's Association, Consumer Federation of America, Consumers Union, Green Science Policy Institute, International Association of Fire Fighters, Kids in Danger, Philip J. Landrigan, M.D., M.P.H., League of United Latin American Citizens, Learning Disabilities Association of American, National Hispanic Medical Association, Worksafe

Petition scope:

To ban the following consumer products if they contain non-polymeric, additive OFRs:

- Any durable infant or toddler product, children's toy, child care article, or other children's product (other than children's car seats);
- Any article of residential upholstered furniture;
- **Any mattress or mattress pad;** and
- The plastic casing of any electronic device.

Petition requested that:

- The products be considered “banned hazardous substances” under the FHSA if organohalogen flame retardants are present.
- Organohalogen flame retardants be treated as a *class* of chemicals and banned for use in the specified consumer products.

- On September 20, 2017, the Commission voted to:
 - Grant the petition,
 - Direct staff to convene a Chronic Hazard Advisory Panel (CHAP), and
 - Publish non-binding guidance.

Commission Guidance on OFRs

- Published on September 28, 2017, the non-binding guidance recommends:
 - Eliminating the use of OFRs in the specified products;
 - Obtaining assurances that such products do not contain OFRs; and
 - Avoiding products containing OFRs, especially consumers who are pregnant or with young children.
- This guidance is a recommendation, not a legal requirement.

<https://www.regulations.gov/document?D=CPSC-2015-0022-0215>

Rulemaking Process for OFRs

- CPSC generally regulates hazardous household substances under the FHSA.
- The FHSA is risk based.
 - CPSC staff must assess the health risks from exposure to OFRs in the applicable products cited in the petition if they contain OFRs.
- Commission must establish a CHAP before proposing a regulation to ban a product related to a risk of cancer, birth defects, or gene mutations.

OFRs – Next Steps

- CPSC staff is working with the National Academy of Sciences (NAS) to develop a plan for assessing the health risks of OFRs.
- FAQs have been posted on the CPSC website at:

[https://www.cpsc.gov/business--
manufacturing/business-education/business-
guidance/flame-retardants](https://www.cpsc.gov/business--manufacturing/business-education/business-guidance/flame-retardants)

- Aware of concerns about SRM cigarette supply
- Monitoring with NIST
- Any guidance will be announced:
 - Mattress Business Info page
 - Mattress Listserv
 - ISPA



Credit: copyright Robert Watters

- Staff interested in updating
 - Mattress visuals for safety messaging and social media
 - FAQ and Tips Sheet
 - Searchable laboratory list
 - Domestic
 - Overseas

Furniture Industry “Tech to Tech” meeting

- Wednesday, May 16, 2018
- National Product Testing and Evaluation Center in Rockville, MD
- The one day meeting will bring together industry, government, research, and laboratory stakeholders to collaborate on current topics involving upholstered furniture flammability, manufacturing, technology, and consumer safety.
- Dr. Andrew Lock, alock@cpssc.gov

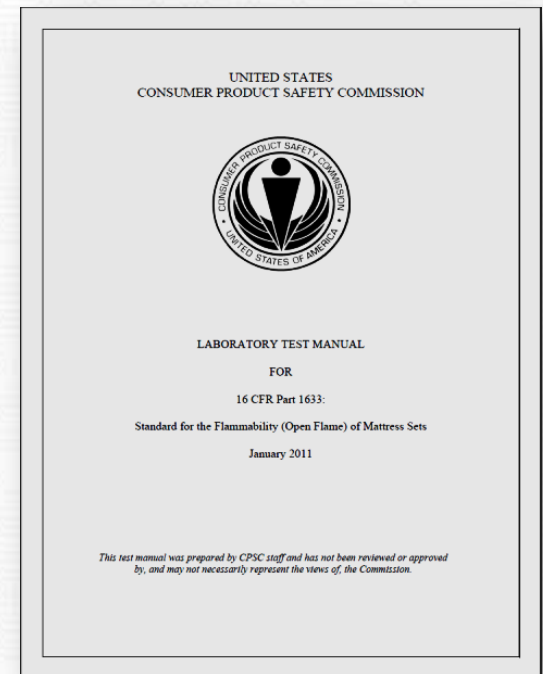
Compliance Webinar on Violations

- Early planning stages
- June or July 2018 target date
- Will be announced:
 - Public Calendar
 - Mattress Listserv
- Justin Jirgl, jjirgl@cpsc.gov

Designing for Safety-Mattresses

- Comply with all applicable safety requirements
- Conduct required testing
 - Flammability
 - Requirements for children's products
- Maintain procedures and retain records
- Monitor components and suppliers
- Confirm materials and component specifications
- Maintain consistent methods of assembly
- Report problems early

- Regulations and test methods
- Laboratory test manuals
- Business resource page
- Mattress information webpage
- E-mail listserv
- www.CPSC.gov



CPSC Stands for Safety



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