



Final Rule for Flammability of Mattress Sets

ICPHSO Update on Current Issues

May 10, 2006

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*Opinions expressed by Ms. Neily have not been reviewed or approved by and do not necessarily reflect the views of the Commission.

Mattress Rulemaking

- ANPR published October 11, 2001
- NPR published January 13, 2005
- Final rule published March 15, 2006—
effective July 1, 2007.
- Final rule addresses mattress/bedding fires
initially ignited by small open flame and
similar scenarios

Standard's Performance Test

- Objectives:
 - Limit fire intensity
 - Provide time for discovery and escape by preventing or delaying flashover
- Performance criteria that limits the fire
 - Max. 15 MJ total heat release in 1st 10 min.
 - Max. 200 kW peak rate of heat release in 30 min test

Mattress Test Burner Exposure



Mattress Set with Conventional Materials

In 3 to 5 minutes, $>2,000$ kW

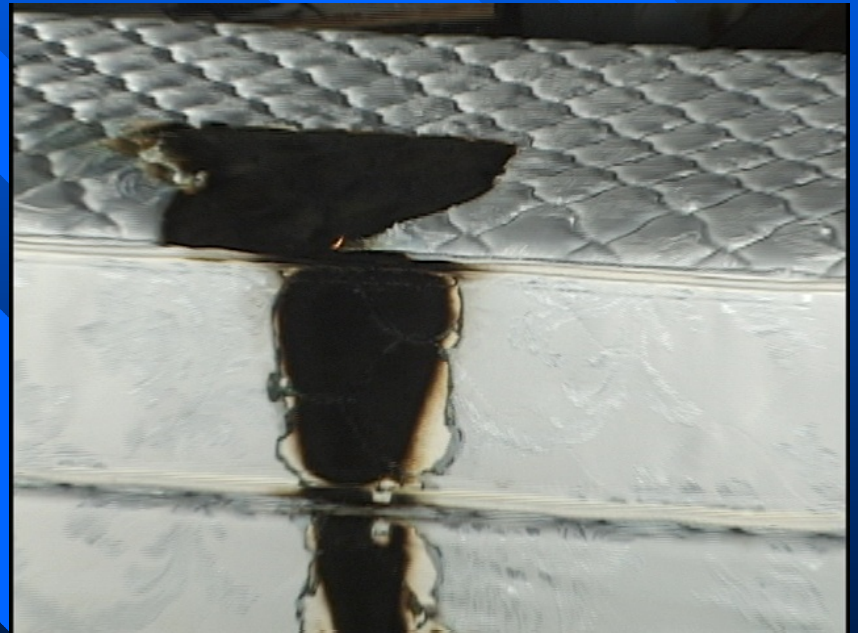


Improved Mattress Set Performance

Thirty minutes after exposure to burners



Under 100 kW



Under 50 kW

Fire Loss Estimates

- Annual national fire loss estimates for 1999-2002--mattress/bedding 1st items to ignite
 - 15,300 residential fires; \$295.0 million property loss
 - 350 civilian deaths
 - 1,750 civilian injuries
- Many of these fire losses addressable (based on characteristics of fire cause)
- Final standard could prevent annually:
 - Estimated 240 to 270 deaths (69 - 78 %) and
 - 1,150 to 1,330 injuries (73 - 84%)

Final Regulatory Analysis

- Benefits – Costs = Net Benefits
- Expected benefits of standard are significantly greater than the costs.
 - Total net benefits are about \$36 per mattress set.
 - Aggregate net benefits of all mattress sets produced in first year are about \$823 million.
- Initially, mattress cost may be up to \$25 more; should go down because of competition.

Public Comments on Proposed Rule

- Approx. 550 comments received
- Supporters provided comments on
 - Scope and definitions
 - Testing procedures
 - Recordkeeping requirements
 - Importer/renovator responsibilities
- Those opposed expressed concerns about health effects of FR chemical use
- Comments addressed through further research and changes in the standard

Conclusions

- Standard is designed to minimize possibility of or delay flashover
- Could eliminate 240-270 deaths and 1,150-1,330 injuries annually
- Standard changes/clarifications made in response to comments
- In-depth study of FR chemicals used indicates no appreciable risk of health effects
- Expected benefits substantially greater than costs; least burdensome alternative
- Effective date coincides with market cycles.

Commission Decision

- March 15, 2006, published final mandatory flammability standard for mattress sets
- Effective date: July 1, 2007
- Documents related to the new standard are available at www.cpsc.gov/library/foia
 - Staff briefing materials
 - *Federal Register* notice

Two New Projects

- Bedclothes Flammability (open flame ignition)—ANPR March 15, 2006
- Possible Revocation/Amendment of 16 CFR 1632, Standard for the Flammability of Mattresses and Mattress Pads (cigarette ignition resistance)—ANPR June 23, 2005

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■ **Cigarette standard revocation/amendment**

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