

## Memorandum

Date:

January 12, 2007

TO

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Office of Hazard Identification and Reduction

THROUGH:

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Directorate for Engineering Sciences

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FROM

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SUBJECT:

National Burn Center Reporting System, Report of Incidents from June 2004

through December 2005<sup>1</sup>

## **BACKGROUND**

The U.S. Consumer Product Safety Commission (CPSC) enforces the Standard for the Flammability of Clothing Textiles (for general wearing apparel) and two Standards for the Flammability of Children's Sleepwear. The Standards for the Flammability of Children's Sleepwear are designed to protect children from burns by requiring that children's sleepwear be flame-resistant (FR). Amendments to the children's sleepwear standards in 1996 exempted tight-fitting children's sleepwear and infant garments sized 9 months or smaller from the FR requirements.

In order to help get a more accurate count of burns related to children's clothing, CPSC, in cooperation with the American Burn Association and Shriners Hospitals for Children, developed a new National Burn Center Reporting System (NBCRS) in 2003. The NBCRS is a surveillance system designed to capture clothing-related burn injuries to children under 15 years old treated in burn centers in the United States. These incidents involved the ignition, melting and smoldering of clothing. Of the 105 burn centers in the United States that treat children, 92 agreed to participate in the NCBRS.

**September 2004 NCBRS Report.** The first NBCRS report was issued by the CPSC staff in September 2004.<sup>2</sup> In its first NBCRS report, CPSC staff analyzed 209 incidents, involving 213

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<sup>&</sup>lt;sup>1</sup> This analysis was prepared by the CPSC staff, has not been reviewed or approved by, and may not necessarily reflect the views of, the Commission.

<sup>&</sup>lt;sup>2</sup> U.S. Consumer Product Safety Commission National Burn Center Reporting System, September 2004. Debra S. Ascone, Division of Hazard Analysis. http://www.cpsc.gov/CPSCPUB/PREREL/prhtml05/05028.pdf-917.9KB

victims, associated with clothing-related injuries to children under age 15 submitted by 44 burn centers from March 2003 to June 2004. Two children died from their burns. Three-quarters of the children were boys. The youngest child was two months old; the oldest was 14 years of age.

Of the 209 reported incidents, 36 involved clothing worn at some time for sleeping. Most of the clothing worn for sleeping was daywear subject to the Standard for the Flammability of Clothing Textiles, but not subject to the flame resistance requirements of the Standards for the Flammability of Children's Sleepwear. Of the incidents involving garments subject to the sleepwear standards, there were no incidents involving tight-fitting sleepwear or infant garments sized 9 months or smaller.

## SUMMARY OF NCBRS INCIDENTS FROM JUNE 2004 THROUGH DECEMBER 2005

From June 2004 through December 2005, 33 burn centers submitted reports of children under 15 years of age who were burned when their clothing ignited, melted or smoldered. The burn centers that agreed to participate in the NBCRS, but did not report any incidents, stated that the reason for non-submission was that the burn center did not treat any cases within the scope of the data collection.

From June 2004 through December 2005, 253 incidents were reported; 261 children were involved in the incidents, 1 of whom died as a result of the burn injuries. About three quarters (197/253) of the involved children were boys. The youngest child involved in the incidents was 12 weeks old and the oldest child was 14 years old, which was the age at which data collection stopped.

Of the 253 incidents, the most frequent scenario was a child playing with a lighter, followed by a child standing too close to an outdoor fire.

Nearly one-half (47%) of the 253 incidents involved accelerants. Most of the incidents involving accelerants were associated with outdoor fires, including campfires, bonfires and trash fires.

In 33 incidents, the children were injured while wearing clothing that was at some point worn for sleeping. Thirteen of these incidents involved daywear worn for sleeping. An additional six incidents involved children wearing daywear and either underwear or diapers. Fourteen of the 33 clothing worn-for-sleeping incidents involved sleepwear that appears to be subject to the Standards for the Flammability of Children's Sleepwear. There were no incidents involving garments that may be considered 100% cotton "tight-fitting" sleepwear or infant garments sized 9 months or smaller.

## **DISCUSSION**

As with the previous reporting period, a review of the incidents from June 2004 through December 2005 showed that accelerant involvement is a prevailing problem in clothing-related burn injuries. Nearly one-half of the 253 in-scope incidents involved flammable liquids that were spilled onto or near the ignition source or intentionally used with the ignition source. Gasoline was the most frequently reported flammable liquid involved.

Our continued analysis of the National Burn Center Reporting System data has revealed no deaths or injuries attributable to the exempted infant size and tight-fitting sleepwear since March 2003. CPSC staff believes that this demonstrates no increase in deaths and injuries associated with these products since the exempted infant size and tight-fitting sleepwear have been available in significant quantities.