

available) than did fires involving any other category of consumer products under the Commission's jurisdiction. About four-fifths of the estimated deaths and about two-thirds of the estimated

injuries that CPSC staff believes could be addressed by a mandatory standard were from smoldering ignition by smoking materials (almost always cigarettes), as shown below. In addition,

about four-fifths of the estimated societal costs (\$1.9 billion out of \$2.4 billion) of upholstered furniture fires were cigarette ignition-related.

ESTIMATED 1998 ADDRESSABLE UPHOLSTERED FURNITURE FIRE LOSSES⁵

	Fires	Deaths	Injuries	Property Loss (\$mil)
Smoking Materials	4,700	340	730	87
Small Open Flame	1,500	80	350	32
Total	6,200	420	1,080	120

Although cigarette-ignited furniture fire deaths have declined by about 70 percent over the past two decades, recent years' data suggest the decline may be leveling off. Even at the 1998 level, the number of deaths is large, and the potential economic benefits of reducing the \$1.9 billion in societal costs are substantial.

F. Existing Standards

1. UFAC Program

The UFAC voluntary program contains six cigarette ignition performance tests for different upholstered furniture components (cover and interior fabrics, "barriers" *i.e.*, batting, decking and filling/padding materials, decorative trim and welt cord) as well as certification and product labeling provisions. The UFAC guidelines encourage the use of the inherently smolder-resistant materials that have become popular on the market.

The UFAC fabric classification test (now embodied in ASTM voluntary test method E-1390) denotes upholstery cover fabrics as either Class I or Class II. Class I fabrics are less ignition-prone. Class II fabrics are more ignition-prone. To conform to the UFAC guidelines, Class II fabrics may only be used in constructions with smolder-resistant batting (or other materials that conform to the UFAC "barrier" test) between the fabric and interior materials of the furniture. However, CPSC laboratory testing of full scale chairs demonstrated that UFAC-conforming products made with smolder-prone fabrics can ignite and burn even when polyester batting or other ignition-resistant fillings are present. Thus, CPSC staff believes that

UFAC component conformance does not guarantee cigarette resistance of the finished article.

2. California Technical Bulletins

California Technical Bulletin 117, which is mandatory for all upholstered furniture sold in the state, contains component performance tests for cigarette ignition resistance of fibrous/loose fill and cellular foam filling materials. Upholstered furniture sold in California must also be labeled as complying with the TB-117 performance requirements.

Like the UFAC voluntary program, TB-117 is comprised of component tests. Another California standard, TB-116, is available to manufacturers on a voluntary basis. TB-116 incorporates a full-scale (or small-scale composite) cigarette test. Manufacturers whose products meet this standard may use labels stating that the products provide a higher level of fire protection.

TB-116 and 117 are not national standards. However, some manufacturers, importers and retailers offer TB-117-compliant products for nationwide distribution.

3. Fire Safe Cigarette Legislation

Regulations implementing New York State legislation requiring "fire-safe," *i.e.*, lower ignition propensity (IP), cigarettes may become effective in 2003.⁶ Lower IP cigarettes would presumably reduce fire losses, including those involving upholstered furniture. Several federal fire-safe cigarette bills were introduced unsuccessfully in the 107th Congress.⁷ The extent to which lower-IP cigarettes may reduce the risk of ignition of upholstered furniture and other home furnishings is currently unknown.

G. Finding

Based on information currently available to it from investigations, research, and other sources, the Commission finds that a new flammability standard, or other regulation, may be needed for upholstered furniture products made from fabrics and related materials, and for fabrics and related materials used in, or intended for use in upholstered furniture, to protect the public against the unreasonable risk of the occurrence of fire leading to death, personal injury or significant property damage. FFA section 4(a), 15 U.S.C. 1193(a). The risk of the occurrence of fire addressed in this ANPR is that from ignition of upholstered furniture by small open flames and/or smoldering cigarettes. Commencing this proceeding expands the Commission's prior FFA proceeding addressing small open flame ignition sources such as matches, cigarette lighters, and candles to also include ignition by smoldering cigarettes.

H. Regulatory Alternatives Under Consideration

1. Flammability Standard

If the Commission finds that one is needed to adequately protect the public against an unreasonable risk of the occurrence of fire leading to death, injury, or significant property damage, it may promulgate a flammability standard for upholstered furniture. Any such standard must be stated in objective terms and be reasonable, technologically practicable, and appropriate. FFA section 4(b), 15 U.S.C. 1193(b). It also must be limited to those fabrics, related materials, or products that have been determined to present the unreasonable risk of fire at issue in the proceeding. *Id.*

2. Labeling Regulation

Either separately or as part of a flammability standard, the Commission may consider issuing a labeling regulation as part of this proceeding. FFA section 4(a), 15 U.S.C. 1193(a).

⁵ Addressable losses from NFIRS cases identified as upholstered furniture, with appropriate coding for type of material ignited, area of origin, ignition factor, and equipment involved. Out-of-scope or inconsistently coded cases, including incendiary and suspicious fires, are excluded. *Source:* Upholstered Furniture Flammability: Regulatory Options, CPSC October 2001.

⁶ Fire Safety Standards for Cigarettes, N.Y. Executive Law, Chapter 18, Article 6-C, § 156-c (McKinney 2003).

⁷ See, *e.g.*, Fire Safe Cigarette Act of 2002, HR 5059 IH, 107th Congress, 2d Session, introduced June 27, 2002.