

Toxic-Free Fire Safety for Child Care

Choosing healthy materials for a fire-safe facility without harmful chemicals



Fire safety is an important to any building. Child care providers are already required to take steps to reduce fire risk, including not smoking around children and installing and maintaining smoke detectors. Until recently, foam-based products like nap mats and sofa cushions had chemicals added without evidence they actually prevented fires. These chemicals are released and build up in house dust, and in our bodies. Since we spend 90% of our time indoors, choosing the flame-retardant free, fire-safe materials can make a difference.

Fire Safety without the Chemicals of Concern

What's the problem?

Flame retardants are chemicals added to fabric (textiles), padding (primarily polyurethane foam), and plastics to reduce the start or spread of a fire. They are made with organohalogens (often bromine and chlorine), organophosphates, and nitrogen. Extensive research on a number of halogenated flame retardants shows that these chemicals can contribute to cancer, learning and developmental disabilities, and infertility. One set of living room furniture can contain two pounds of flame retardant chemicals.



Research has found that the chemical leave furniture, electronics and fabrics, contaminating house dust. Most people carry flame retardants in their bodies, and young children have been found to have up to 15 times the amount of the chemicals than their mothers.¹ Many flame retardants build up in animals, concentrating as they move up the food chain, and can be carried vast distances: flame retardants are found in polar bears and other arctic animals.²

The good news is that changes in California's fire code has been changed to maintain fire safety but is now can be met without chemical additives in padded furniture. The bad news is while many companies have stopped using flame retardant chemicals, some companies have not taken the step to source flame retardant-free materials.

🔍 **Spot 'em: Where can flame retardant chemicals be found?**

- **In the nursery:** foam products like crib wedges, bassinet mattresses, changing pads, nap mats.
- **In the living room:** sofas and padded chairs (both foam and textiles can contain it), televisions and other electronics (plastic housing, and circuit board).
- **Underfoot:** in recycled-content foam carpet padding.
- **In the walls:** many kinds of insulation.
- **Commercial curtains.** This doesn't apply if you operate home-based programs.

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What Can I Do?

1. **Ask retailers** or manufacturers to verify that a product you're purchasing is flame retardant-free. Many crib mattress, nap mat, sofas and other manufacturers now make products without these harmful chemicals.
2. **Keep electronics out** of spaces used by young children. This primarily means computers and televisions, but also includes hand-held devices. (One more reason to reduce or eliminate screen time!)
3. **Avoid wall-to-wall carpet**, and if you choose carpet padding, avoid recycled-content materials.
4. Choose **window shades** that don't require a flame retardant treatments – ideally wooden shades/shutters to avoid PVC (which can contain lead and phthalates, subjects of previous tips). Home-based child care providers don't have to meet commercial flammability standards, and could use cloth without treating it.
5. If renovating, look for **inherently flame-resistant insulation**. Spray foam, for example, also has added flame retardant chemicals, making it a less favorable option.

NOTICE

THIS ARTICLE MEETS THE FLAMMABILITY REQUIREMENTS OF CALIFORNIA BUREAU OF ELECTRONIC AND APPLIANCE REPAIR, HOME FURNISHINGS AND THERMAL INSULATION TECHNICAL BULLETIN 117-2013. CARE SHOULD BE EXERCISED NEAR OPEN FLAME OR WITH BURNING CIGARETTES.

The upholstery materials in this product:

☐ contain added flame retardant chemicals

☒ contain NO added flame retardant chemicals

The State of California has updated the flammability standard and determined that the fire safety requirements for this product can be met without adding flame retardant chemicals. The state has identified many flame retardant chemicals as being known to, or strongly suspected of, adversely impacting human health or development.

For More Information

- Clean and Healthy New York's reports are available here: www.cleanhealthyny.org/our-reports including *Safe Sofas and More* (2015) and *Flame Retardants Finally Fade* (2013)
- Green Science Policy Institute www.greensciencepolicy.org/topics/flameretardants/
- Building materials safety and hazards: Healthy Building Network's Pharos Project (you can get free access for a two week trial): www.pharosproject.net/

Sources

- (1) "California Policy Linked to Higher Flame Retardant Exposures," a new report from Environmental Working Group and Duke University. www.ewg.org/research/california-policy-linked-higher-exposures-harmful-flame-retardants/full-report
- (2) "Chemical fire retardants found in Arctic reindeer dung" Alaska Dispatch News, December 2015. www.adn.com/arctic/article/chemical-fire-retardants-found-arctic-reindeer-dung/2015/12/22/

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