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Opinion

Did the state kill my cat?

Fire-retardant chemicals required by California in furniture may be poisoning us. By Arlene Blum PhD October 17, 2008

My beloved cat, Midnight, died a few days ago -- possibly because of toxic chemicals in my furniture. In two years with hyperthyroid disease, Midnight went from a plump 14 pounds to a skeletal five. A year ago, a veterinary epidemiologist found that Midnight's blood contained among the highest levels of PBDEs documented in animal research. That's when I learned that the chemicals in my cat came from my couch. And that my furniture is uniquely toxic because I live in California.

Since the 1980s, fire-retardant chemicals such as PBDEs have been added to furniture to meet a California-only requirement that the foam inside resist a 12-second exposure to an open flame. The chemicals evaporate from the foam, settle in dust and coat walls with a thin film. Cats that groom themselves and toddlers who crawl in dust show especially high levels of PBDEs, but everyone with this chemically treated furniture gets some exposure.

In dozens of animal studies, these fire retardants also have been shown to harm reproduction and scramble brain development. Studies are underway to determine if PBDEs are contributing to increases in autism, hyperactivity, birth defects, infertility, diabetes and obesity in people.

On average, dust in California homes contains 10 times the PBDEs found in dust from other states and 200 times the amount in houses in Europe, according to a new study from the Silent Spring Institute. Worse, Californians have twice the level of this fire retardant in their blood as do people in other states. A recent research report by the nonprofit Environmental Working Group showed that American toddlers have, on average, a level of fire retardant in their bodies that is three times higher than that found in their mothers.

Every evening for the last year, I put a needle into Midnight's scruff to give her fluids to keep her alive. As I watched the slow drip of the liquid, I wondered whether the PBDEs in my cat caused her disease. The fire retardant is known to cause thyroid problems in rats, mice, kestrels and frogs. The EPA suspected a link after its 2007 study of cats found substantially higher levels of PBDEs in the ones with hyperthyroidism. In 1980, when PBDEs were first added to furniture, hyperthyroid disease in cats hardly existed, according to my veterinarian. Now it is an epidemic in California.

Were Midnight and my family safer from fires because of the toxic chemicals in our couch? Probably not. Furniture fabric in California is not required to be fire resistant. In a fire, fabric burns long enough to ignite even treated foam.

Happily, the death rate from house fires has gone down considerably in California since 1980. But it's dropped a similar amount or more in states that don't require retardants in their furniture. A decrease in smoking, more smoke detectors and better enforcement of fire safety standards are credited with this large decrease in fire deaths.

San Francisco Democratic Assemblyman Mark Leno's AB 706, a bill that sought to remove toxic fire retardants from California furniture and maintain fire safety, was just voted down by the state Senate. Manufacturers of fire retardants -- Chemtura Corp., Albemarle Corp. and Israel Chemicals Ltd. -- spent millions on lobbying to stop it.

Instead, more Californians may soon be sleeping in a cocoon of chemicals. Technical Bulletin 604, a proposed state regulation requiring comforters, mattress pads and pillows to resist an open flame, is expected to be enacted soon by the California Bureau of Home Furnishings and Thermal Insulation. Yet the state has not asked for any information on the health or environmental effects of the chemicals likely to be used.

As I stroked Midnight before she died, I thought about the canary in the coal mine warning of lethal gases. Perhaps the story of Midnight's death can help protect us all from unneeded toxic fire retardants in our homes.

Gov. Arnold Schwarzenegger has the authority and responsibility to protect our health. He should instruct the bureau to stop California from being the only state requiring flame-retardant bed coverings, pillows and furniture. It's too late for Midnight, but hopefully our governor will withstand chemical industry pressure and act to protect our cats and our children from unneeded toxic chemicals in our homes.

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