

What's Really In A New Mattress?

Most new mattresses sold contain toxic chemicals to meet the new fireproofing laws.

There are no labeling requirements of the chemicals in beds and many major manufacturers make no claims of their mattresses being fireproof. Thus it is impossible to know if you are getting a clean bed. All mattress makers will claim they use no chemicals, but the CPSC (Consumer Products Safety Commission) documents prove otherwise.

If you want a clean bed your only choice is to purchase and sleep on a bare waterbed or have your mattress(s) treated with an approved cleaning and sanitizing method such as those offered by such companies as Hygienitech Mattress Cleaning Systems.

In their Jan-06 Risk Assessment the CPSC proves the average adult will absorb a daily dose of .802 mg of Antimony, .081 mg Boric Acid, and .073 mg DBDPO (Deca) from flameproof mattresses, every night.

All three are acute poisons and two cause cancer. *(Most people do not want themselves or their children to absorb any amount of poisons from their mattresses every day, to avoid the one in one million risk of dying in a mattress fire.)*

Plus, Children under age five are excluded from the risk assessment. The CPSC assumes all these children will be protected by a vinyl sheet over their mattresses due to bedwetting problems, and that this will protect them from exposure to these known acutely toxic chemicals. As there are no mandatory labeling requirements, most parents will never know if their new mattresses contain toxic chemicals.

Unlike other flame-retardants that we initially thought of as being non-toxic-- like Asbestos, and later find them to be extremely harmful, we already know these are acutely toxic and cancer causing.

Antimony: Quote from College Chemistry Textbook: "Antimony resembles Arsenic very closely; the difference in its behavior being almost entirely accounted for by the fact that antimony is slightly more metallic." This helps explain why it is so poisonous. Quotes from ATSDR a division of the CDC on Antimony: "An increase in the number of spontaneous abortions, disturbances in menstruation, failure to conceive, May cause heart to beat irregularly or stop. ... Chronic Exposure: Prolonged or repeated exposure may damage the liver and the heart muscle." "In long-term studies, animals that breathed very low levels of antimony had eye irritation, hair loss, lung damage, and heart problems.

Problems with fertility were also noted." "Two studies reported lung tumors in rats exposed to relatively low levels of antimony trioxide." Antimony tends to accumulate in the liver and gastrointestinal tract." The CDC cannot determine a safe level of Antimony exposure because: "At the lowest exposure levels tested, the adversity of the effects was considered to be serious." On cancer risks of Antimony even the CPSC admits: "The cancer effects are cumulative. Every exposure contributes to the overall lifetime risk of developing cancer."

Boric Acid: also used as Roach Killer, is a known reproductive and developmental toxin, a known respiratory irritant, demonstrated injury to the gonads and to the developing fetus. high prenatal mortality, Neonatal children are unusually susceptible. There are already 6,463 U.S. cases of Boric Acid poisoning each year. One human exposure study showed reduced sperm counts and reduced sexual activity in humans.

DBDPO: Deca, is in the family of PBDE's, is known to bioaccumulate, is linked to cancer, and groups are trying to get it banned.

The CPSC has completed extraction studies that show the percentage of FR chemicals contained in various mattress flame barriers. They have also completed leaching and migration studies that prove these chemical reach the surface of our mattresses through the sheets, to be absorbed by our bodies, and base the above poison absorptions calculations on this data.

Overview:

A new law already effective in the state of California, and soon to be enacted nationwide by the Consumer Products Safety Commission (CPSC), requires mattresses to resist ignition from open flames, even though a 1973 federal law already requires all mattresses to resist ignition from burning cigarettes-- and mattress fires have already declined by 68%. Since it requires toxic chemicals in the surface of all new mattresses to meet the new law, we think the risks of the new law outweigh the benefits.

Most people will think it can't be that bad, it is probably OK. Please consider the following:

The CPSC hopes to save up to 270 lives annually after ten or more years, after all existing mattresses are replaced. This seems overly optimistic and the real number saved can be calculated to only 21 using the CPSC's own data. With 300 million people in the United States unknowingly taking the risk of sleeping in toxic chemicals, they avoid the one in one million risk of dying in a mattress fire. Using the 21 saved number the risk is one in fourteen million. By comparison annual US deaths are 6,091 as a pedestrian, 16,337 as a car occupant, and 17,550 from accidental poisoning by and exposure to noxious substances. Even before the new law, your risk of dying from toxic chemicals is greater than your risk of dying in a car accident.

There is an entire specialty of real medicine that treats people poisoned by the toxic chemicals in our modern environment, real M.D.'s taught by top schools such as Harvard Medical School. These Doctors see first hand the pain, suffering, and death of these people. All of these Doctors oppose this law.

Every life is important and it is hard to argue with fire safety. However, if this law kills even one more than it saves, it is clearly wrong. It has the potential to kill millions of people. **If only 15% of our mattresses prove toxic -- 45 Million people will die.**

1. The chemicals used to flameproof mattresses have never been studied for human exposure risk in this application. (Except now the CPSC has released a limited study)
2. We know almost all the chemicals to flameproof mattresses are acutely toxic and many also cause cancer.
3. The science of Toxicology uses high-dose short-term exposure on various animals to predict the effect of low-dose long-term exposure on humans. This is exactly the risk in mattresses, close chronic exposure eight hour per day for the rest of our and our children's lives.
4. The developing fetus and young child is particularly vulnerable to certain environmental toxins. Over the past three decades, researchers have found that remarkably low-level exposures to these toxins are linked with less overt symptoms of toxicity—intellectual impairments, behavioral problems, spontaneous abortions, or preterm births.
5. Antimony Trioxide is the most commonly used flame retardant in mattresses to meet the new law. Antimony is a heavy metal like Lead with similar toxic effects. Antimony is proven to leach from mattresses and linked to heart damage, cancer, and SIDS.
6. Boric Acid, also a roach killer, is commonly used as a flame retardant in mattresses to meet the new law. It is known to attack the developing fetus and testicles as its primary targets. In addition to death, birth defects, infertility, and sterility, studies show overexposure reduces sexual activity in humans.
7. Children could be poisoned from sucking on a Boric Acid mattress. There are 6,463 cases of Boric Acid Poisoning in the US each year.
8. Formaldehyde, Bromine, and other dangerous chemicals are also used in many systems. It is difficult if not impossible to find the truth. Even mattress manufacturers usually don't know which chemicals are present in their flame barrier systems. We can't find any, but even if safe systems exist, all mattresses must be safe or we will eventually harm or kill a percentage of our people. If 33% prove toxic, 100 Million people are harmed. If only 1% prove toxic, it is still 3 Million people harmed or killed.
9. We should learn from our toxic legacies of the past. We have made previous mistakes with flame-retardants such as PCB's banned in the 70's; Tris, Asbestos, and now PBDE's are being found in people's bodies and women's breast milk in alarming and growing amounts.
10. The chemical industry estimates we save up to 960 people per year with the 1.2 Billion pounds of flame-retardants the US uses annually. Now we will be required to sleep in them too. We have already killed 300,000 people, and continue to kill 10,000 annually, with Asbestos alone.
11. Consumers will be forced to pay an average of \$100 more for every new mattress purchased to meet this law.

12. The innerspring mattress industry through their trade association ISPA went to the CPSC and asked for this law. It seems clear it benefits the large companies by restraining competition, forcing the smaller companies out of business, and raising prices, revenue, and profits.
13. Even the man who started and wrote this law in California, Whitney Davis, is now having second thoughts: "The Problem: the only chemicals they can use to achieve compliance are listed as toxic to humans by the EPA." and "You don't know until 10 years down the road and there's a problem," he said.