

Flame Retardants in Mattresses: How They Affect Your Health

If we told you that your mattress is covered with chemical flame retardants, you might think that was a good thing. No one wants to be burned alive in their sleep. But did you know that the chemicals found in flame retardants carry serious consequences for your health? At BioPosture, we believe that you should have the power to make an informed choice about your exposure to these chemicals. Here are three key things that you need to know about the flame retardants in your mattress.

The History of Flame Retardants in Mattresses

Due to a desire to avoid human combustion, California passed legislation in 1975 to ensure that all furniture sold in the state had gone through flammability testing. National lawmakers had not yet passed any laws in regard to this issue, so California's TB 117 became the national standard. In order to pass the test, mattress manufacturers applied fire retardants to their products. The only problem with this was that they didn't consider how those chemicals could themselves be hazardous to our health.

The original law was a reactive measure that did very little to save people from fire hazards. Instead, it exposed generations of families to toxic chemicals. In 2013, lawmakers removed the original open flame test in favor of a smolder resistance test. This meant that many manufacturers could use less flammable materials in their mattresses. However, treating a mattress with fire deterrents is much cheaper than rethinking the materials inside the mattress. The updated legislation paved the way for better methods of production, but progress has been slow.

Flame Retardants Make Fire Damage Worse

Smoke-inhalation deaths are the most prevalent fire-related deaths in the United States. This means that if you are sleeping when a fire starts, the smoke from both the fire and the flame retardants in your mattress will kill you long before your mattress ever catches fire.

If your mattress does catch fire, flame retardants will make the problem worse. These chemicals release an extra level of carbon monoxide and smoke. This lethal combination does much more damage to your lungs than normal smoke does.

A better solution for fire safety is the simplest one: don't smoke in bed, purchase a good smoke detector, and change its battery regularly.

These Chemicals Are Proven to Be Hazardous

Hundreds of combinations of flame retardants exist. Unfortunately, manufacturers are not up-front about which varieties they use. When manufacturers phase out one chemical cocktail, they usually replace it with another that is just as bad. The Consumer Product Safety Commission recently denounced new organohalogen varieties (OFRs) for many of the same reasons that they denounced the old polybrominated diphenyl ethers (PBDEs).

However, all of these chemicals are harmful regardless of which one is the current culprit. They cause a range of health problems (particularly in children). Scientists have proven that they are endocrine-disrupting chemicals, which means that they interfere with the body's natural release of hormones. They have been linked to infertility, impaired cognitive function, and various cancers, and the amount of evidence against them continues to build.

Flame Retardant Chemicals Travel

Perhaps the scariest thing about flame retardant chemicals in your mattress is that they don't just stay there. They leach out of consumer products, traveling in the air via dust particles. If your mattress has flame retardants, you aren't just sleeping on them. You are breathing them in, absorbing them through your skin, and ingesting them.

These chemicals show up increasingly in your body, to the point that an estimated 97% of US residents have measurable amounts of them in their blood. Most alarmingly, children are at the highest risk, because these chemicals are in baby products as well as mattresses and furniture.

Taking the Next Steps

Thankfully, you can take steps to reduce the amount of flame retardants in your environment. Get an air purifier to filter out as many toxins in your room as possible. Vacuum regularly to keep dust at bay. Check the tags on your furniture and other products to determine if they contain chemical flame retardants. And finally, if you get a Letter of Medical Necessity from your doctor, we can make your BioPosture mattress completely free of flame retardants.