

BREAKING NEWS



For 20 years, we have been telling people of the importance of cleaning our homes with the best possible equipment and to the cleanest possible level, because of the health problems caused by dust in our homes. Many people did not want to believe it... today the evidence is undisputable and its even worse than first believed, and goes well beyond the scope of mere allergies or asthma, or colds or flues.



"Washington State Department of Ecology"
"Flame retardants are used in everyday items (from computer casings to carpet pads to foam cushions in chairs and couches). PBDEs have been linked to brain and thyroid problems in laboratory animals. The levels of PBDEs in people's bodies are doubling every 2 to 5 years"

HEALTH & FITNESS NEWS

"Studies presented by the Environmental California Research and Policy Center earlier this year have linked PBDE fire retardants (polybrominated diphenyl ether) to learning disorders and ADHD in children, and to disruption of thyroid hormone balance, as well as a host of other environmental concerns. PBDEs have already been banned in the European union and have been called the PCB of the new millennium because they remain in the environment and build up in body tissues over a lifetime. The EPA is still evaluating the associated risks and has yet to act."



"A study in May 2000 by McDonald and Hooper showed that PBDEs are passed to children from adults through the placenta and breast milk. Our primary health concern is that it appears that the PBDEs harm the developing brain. ...It causes reductions in their ability to learn, their ability to remember, increased hyperactivity and even hearing loss."

BODY OF EVIDENCE

"Environmental California Research & policy Center"
"When infant lab animals are exposed to (PBDEs) during a key period of development, they develop permanent damage to their nervous systems, resulting in impaired motor skills. This damage worsens with age. Canadian studies have found PBDE levels in humans to be doubling every 2.5 years. Therefore, there may already be segments of the U.S. Population with levels of PBDEs that cause developmental damage. Given the increasing levels of PBDEs in humans, we can safely assume that within 3 years many more segments of the population will have blood levels of PBDE that could cause developmental damage."



"Why do peoples PBDE levels vary widely?"

As the evidence grows, scientists studying the issue are observing that some people are taking up far more of the flame retardant chemicals than others. A small amount of PBDE-containing 'foam dust' (from a couch) could contribute significantly to the amount of the contaminant in household dust. Some people are sitting on nice, new furniture while others are sitting on couches that are falling apart. When they vacuum, it re-suspends the material. If someone is chronically exposed to that, you can predict a spike in their blood level."



Mothers' Milk

Record levels of toxic fire retardants found in American mothers' breast milk



"Environmental Working Group Report for the EPA"
Between November 2002 and June 2003, EWG recruited 20 healthy, pregnant women from across the country to participate in a study of fire retardants in breast milk. Participants collected a breast milk sample within several months of the birth of their child. Samples were analyzed by a certified laboratory. The lab found PBDE's in every breast milk sample tested. More significantly, our tests found levels higher than those reported previously for U.S. women, including two of the highest levels of PBDEs ever reported in human beings in the world. A growing body of research in laboratory animals has linked PBDE exposure to an array of adverse health effects including thyroid hormone disruption, permanent learning and memory impairment, behavioral changes, hearing deficits, delayed puberty onset, decreased sperm count, fetal malformations, and possibly cancer. Many of the known health effects of PBDE's are thought to stem from their ability to disrupt the body's thyroid hormone balance, by depressing levels of the T3 and T4 hormones. One study, for instance found women whose levels of T4 measured in the lowest 10 percent of the population during the first trimester of pregnancy were more than 2.5 times as likely to have a child with an IQ of less than 85 (in the lowest 20 percent of the range of IQs) and five times as likely to have a child with an IQ of less than 70, meeting the diagnosis of "mild retardation".

WARNINGS ON HOUSEHOLD DUST

"Flame retardant chemical found in homes can build up in people"

"The dust in your house may not just be a nuisance. It could be tainted with toxic chemicals being gradually shed by the computer, the sofa, and the coffee maker. And it could be getting into your body, possibly increasing your risk of cancer. In pregnant women, it could be harming fetal brain development. The crucial link in the chain is our measurement of household dust. "It is particularly troubling to know that my daughter is getting these toxic chemicals from the breast milk she drinks and just from being around our home," said Schreder, a scientist for a local environmental group. **What can you do:** Use a vacuum with a HEPA filter and wear a mask while doing housecleaning.



"Environmental Working Group Report for the EPA"

"We asked 10 women from the breast milk study to collect samples of dust from their homes. The ten study participants vacuumed their house as they normally would and sent EWG the dust bag from their vacuum cleaners. Samples were sent to a certified laboratory for analysis. The results were striking. Each of the ten samples contained high levels of PBDE's with concentrations exceeding 3,000 ppb for half of the study homes, and averaging 4,629ppb. The EPA should not wait. It is no longer possible to ignore that (PBDEs) pose a threat to health and the environment.

GROWING THREATS

"Environmental California Research & policy Center"
The human brain is a much more sophisticated organ than the brain of a mouse, and it could be more sensitive to PBDE exposure. In other words, children at the upper range of exposure today probably have PBDEs in their bodies near the levels known to cause brain damage in lab animals, these children may already be suffering damage.

CHEMICALS TO AVOID IN THE NURSERY

"Staying safe in a toxic world"
"Babies and parents are all harmed as PBDEs used as fire retardants in mattresses, bedding, furniture, and building materials enter their blood stream. (The PBDEs) can effect children with measurable changes in a child's intelligence."



If you feel the condition that exists in your home is acceptable, then we recommend you keep using your current vacuum, otherwise call us for a Patriot Home Defense System. 800-811-2433.