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Alert: Potential Toxin

A new study performed at Chatham College in Pittsburgh discovered that potentially toxic air pollutants can accumulate in plush toys. After making the observation that the stuffing used in the toys is extremely similar to absorbents used to collect volatile chemicals for laboratory analysis, researchers decided to test the fabric, padding, and core of the toys for the presence of various toxic pesticides and flame-retarding polybrominated diphenyl ethers, also called PBDEs.

Of the toys examined, most contained a wide variety of chemical compounds, with the highest concentration in the exterior fabric. All of the toys contained PBDEs, with a remarkably high concentration in one recycled toy that was tested. Though these chemicals have widespread use as fire retardants in plastics, foams, and textiles (including children's sleepwear), PBDEs have not been adequately tested, despite being linked to learning impairments in rodents with exposure during their brain development. In fact, PBDEs are structurally similar to polychlorinated biphenyls (PCBs) and polybrominated biphenyls (PBBs), fire retardants used in the past that were eventually banned due to health and environmental effects including birth defects, neurological damage, and thyroid imbalances. While many European countries have already banned PBDEs, the United States has not, resulting in exponentially increasing levels of the chemicals in Americans.

In the study, researchers also found residues of DDT, an insecticide banned long ago, as well as pesticides once used for termites. The toxic nature of the chemicals found in the children's plush toys serves as a significant warning to parents that it is imperative that they regularly wash absorbent toys that children put in their mouth.

References:

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