Portfolio Media. Inc. | 648 Broadway, Suite 200 | New York, NY 10012 | www.law360.com
Phone: +1 212 537 6331 | Fax: +1 212 537 6371 | customerservice@portfoliomedia.com

Fire Retardant Found In Children's Blood: Study

By **Erin Fuchs**

Law360, New York (September 05, 2008) -- A study released by the Environmental Working Group has found that a class of chemicals used in fire retardants is appearing in toddlers' blood at levels three times higher than in their mothers'.

On Thursday, the nonprofit research organization EWG announced that concentrations of polybrominated diphenyl ethers, or PBDEs, were on average three times higher in toddlers age 1.5 to 4 years than in their mothers.

The study — which EWG bills as the first of its kind — found that in 20 families, 86 percent of the time, children had higher levels of PBDEs than their mothers.

The research group said its study offers the first systematic monitoring of Deca PBDE, the only type of this chemical now being manufactured.

"These high exposures early in life point to a previously undocumented, serious, and disproportionate risk to young children," the study found.

The chemicals, which are used as flame retardants in household items like furniture foam and TV cabinets, persist in the environment and accumulate in living organisms, according to the U.S. Environmental Protection Agency.

The regulator has also found evidence that PBDEs could cause toxicity in the liver, thyroid and brain.

"Although use of flame retardants saves lives and property, there have been unintended consequences," the EPA's Web site said.

A spokesman for industry group The Bromine Science and Environmental Forum pointed out that Deca, the only PBDE still being manufactured, was found in relatively low levels in

children in the EWG study.

The study found an average Deca concentration of 4.7 parts per billion in children, whereas it found more than 5 times that concentration of total PBDEs — including those no longer being manufactured — in children.

"Flame retardants save actual human lives, and no illness, ailment, or harm to any human anywhere has ever been reported as a result of exposure to Deca, even among those who work producing the material," said The Bromine Science and Environmental Forum's spokesman, John Kyte, in an e-mail message.

PBDEs in general have been phased out or banned. Great Lakes Chemical Corp., the only manufacturer of PBDEs in the U.S., phased out two types of the chemical, PentaBDE and OctaBDE, in 2004, according to the EPA.

Both California and the European Union have banned those two chemicals, according to the EPA.

The EWG study found an average total PBDE concentration of 62 parts per billion in the children it sampled, with an average of 25 parts per billion for mothers.

Children ingest more PBDEs than adults because the chemicals stick to hands or toys, which toddlers tend to put in their mouths, according to the EWG study.

High PBDE levels in toddlers should spark concern, as single-day exposures can affect learning, memory and behavior, according to the EWG. "Despite the evidence that PBDEs are harmful, that they pollute people's blood ... the EPA has done little to address children's ongoing exposure," the study said.

An EPA spokesman did not respond immediately to a request Friday for comment on the EWG study. The agency's Web site said that, through the Voluntary Children's Chemical Evaluation Program, the EPA has been evaluating PBDE risks for children.

The EPA's Web site said it has been conducting research to measure the chemical in umbilical cord blood, breast milk, children and mother's blood.