

## Disposition and Metabolism of Polybrominated Diphenyl Ethers in Fish

Commercial production of flame-retardants has increased globally over the past 20 years, as has global environmental contamination by PBDEs that compose them. Disposal of flame-retardants through incineration and leaching results in PBDEs in soil sediments and waterways. Like PCBs, to which PBDEs bear a structural resemblance, PBDEs exhibit a bioaccumulative effect in food chains of many ecosystems. In the Great Lakes, recreational and commercial fisheries could potentially transfer the neuro- and endocrine-toxic effects of PBDEs to humans. However, potential health risk assessment is hindered by limited research data on this gasoline additive. Filling a critical data gap, a research team is examining the uptake, tissue distribution, excretion and metabolism of PBDE in rainbow trout, a model fish species. This vital information will advance the state of knowledge on PBDEs in fish and allow for the prediction of these chemicals and their metabolite body burdens under environmental exposure conditions.

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