

Study reveals high levels of contaminants in killer whales

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Little is known concerning environmental contaminants in predators at the top of a food chain. A study published in *Environmental Toxicology and Chemistry* has demonstrated that new types of brominated flame

retardants accumulate in the tissues of killer whales near Norway and are also passed on to nursing offspring.

Investigators also detected man-made chemicals called perfluoroalkyl substances (PFAS) in the tissues of adult [killer whales](#). Thresholds for health effects of PFAS in marine mammals are not established, but the chemical has been linked to reproductive and endocrine effects in wildlife. In addition, polychlorinated biphenyls (PCBs), which have long been banned, were detected in the blubber of 7 of the 8 killer whales in the study at levels that exceeded the proposed threshold for toxicological effects in marine mammals.

"Levels of pollutants in top predators give not only an indication of ecosystem health, but of the persistence of chemicals, passive mobility in the environment, and active biotransport with migrating animals," the authors wrote. "Our results are relevant for the continued environmental monitoring of contaminants in the Arctic."

More information: Clare Andvik et al. High Levels of Legacy and Emerging Contaminants in Killer Whales (*Orcinus orca*) from Norway, 2015 to 2017. *Environmental Toxicology and Chemistry* [DOI: 10.1002/etc.5064](#)

Provided by Wiley

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