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Regional assessment of contaminant bioaccumulation in sport fish tissue in the Southern California Bight, USA

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Abstract

Marine recreational fisheries in California are economically and culturally important; however, consumption of contaminated seafood may be a human health risk. The California Environmental Protection Agency Office of Environmental Health Hazard Assessment developed Advisory Tissue Levels (ATLs) to be used in developing consumption recommendations protecting the health of fish consumers. This study characterizes extent and magnitude of bioaccumulation of contaminants in sport fish in Southern California relative to ATLs. Most zones exceeded the ATL for mercury corresponding to consumption of not more than 3 servings per week in one or more target species. A third of zones exceeded the ATL for total polychlorinated biphenyls (PCBs) corresponding to consumption of not more than 7 servings per week. However, neither mercury nor total PCBs exceeded the most restrictive, "do not consume", thresholds in measured tissues. Contaminant concentrations in fish tissues have remained the same or decreased since a similar survey in 2009.

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