Stranded false killer whales, Pseudorca crassidens, in Southern South America reveal potentially dangerous silver concentrations

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Silver (Ag) is a non-essential metal known to bioaccumulate in aquatic organisms. We determined Ag concentrations in five false killer whales stranded in South America. Silver concentrations (in dry weight basis) range as 6.62?10.78 ?g g?1 in liver, 0.008?7.41 ?g g?1 in spleen, 0.004?5.71 ?g g?1 in testis, 0.757?1.69 ?g g?1 in kidney, 0.011?0.078 ?g g?1 in lung and < 0.01?0.038 ?g g?1 in muscle, whereas in the single samples of uterus and ovary were 0.051 and 0.023 ?g g?1; respectively. Overall, Ag concentration in liver and kidney exceeded the cetacean toxic thresholds, proposed as ?unhealthy concentrations? and ?critically dangerous? in liver and kidney. These results warrant further eco-toxicological studies, to examine biological effects of elevated silver levels for individuals and to assess the species' conservation status with respect to marine pollution.