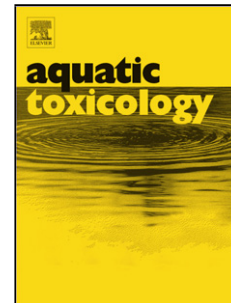


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Dose- and age-specific antioxidant responses of the mysid crustacean *Neomysis awatschensis* to metal exposure

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Highlights

- Evidence on the age-specific bioconcentration of five metals in the marine mysid was obtained
- Age-specific relationship between metal dynamics and ecotoxicity between ages was observed
- Oxidative stress was induced by metals and caused distinctive age-specific antioxidant response

Abstract

Waterborne metals can adversely affect an organism's innate defenses through oxidative stress. In the present study, the marine mysid *Neomysis awatschensis* was exposed to sublethal concentrations (1/10 and 1/5 of the median LC50s) of As, Cd, Cu, Pb, and Zn for 48 or 96 h at the juvenile and adult developmental stages, and the dose- and age-specific antioxidant

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