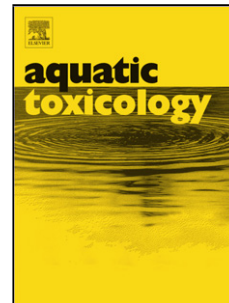


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Exposure to mercuric chloride induces developmental damage, oxidative stress and immunotoxicity in zebrafish embryos-larvae

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Highlights

- HgCl₂ exposure causes developmental damage in zebrafish embryos-larvae.
- HgCl₂ exposure induces oxidative stress in zebrafish larvae.
- HgCl₂ exposure increases the mRNA levels of genes related to the innate immune system in zebrafish larvae.

ABSTRACT

Mercury (Hg) is a widespread environmental pollutant that can produce severe negative effects on fish even at very low concentrations. However, the mechanisms underlying inorganic Hg-induced oxidative stress and immunotoxicity in the early development stage of fish still need to be clarified. In the present study, zebrafish (*Danio rerio*) embryos were exposed to different concentrations of Hg²⁺ (0, 1, 4 and 16 µg/L; added as mercuric chloride, HgCl₂) from 2 h post-fertilization (hpf) to 168 hpf. Developmental parameters and total Hg accumulation were monitored during the

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