

Highlights

- Knowing biotoxin depuration rates can improve efficiency of marine biotoxin monitoring
- We conduct a systematic review and meta-analysis of marine biotoxin depuration rates
- Only 85 species have depuration rates; non-bivalves and non-PSTs are understudied
- Half-lives vary from 0.03-1269 days based on species, toxin, tissue, and environment
- We predict depuration rates for unstudied species and prioritize rates for future study