

# UPDATING THE EVIDENCE: DROWNING PREVENTION INTERVENTIONS FOR ADULTS AND CHILDREN

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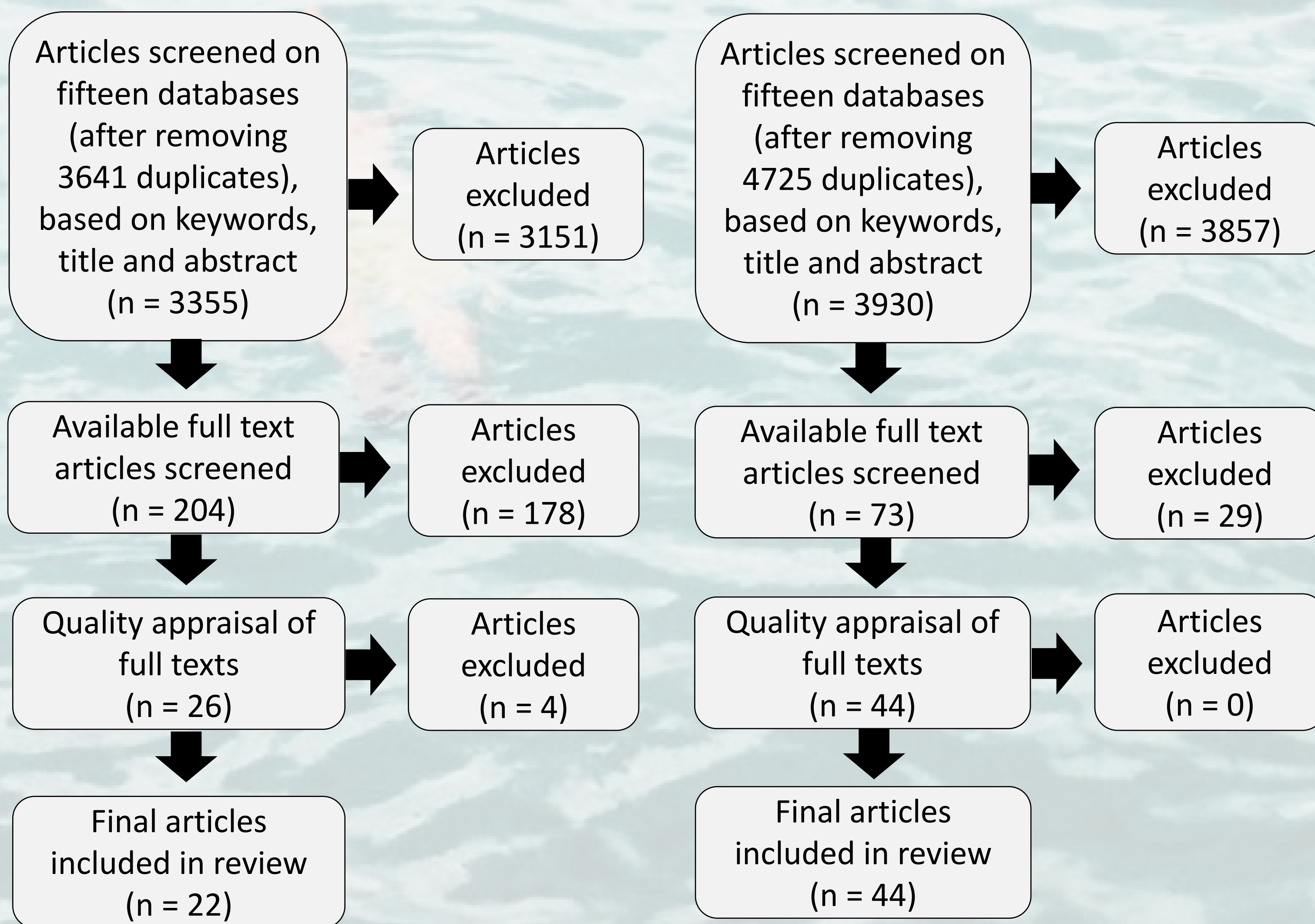
## INTRODUCTION

- Drowning is a complex public health challenge, and its prevention requires community, national and global efforts to mitigate impacts<sup>1</sup>.
- Published evaluation of drowning prevention interventions has been limited.
- New linked systematic reviews address a call for more robust interventions underpinned by evidence-informed approaches.
- Findings present an evidence update on public health interventions that address fatal and non-fatal drowning in adults (SR1) and children aged under 18 years (SR2) globally.

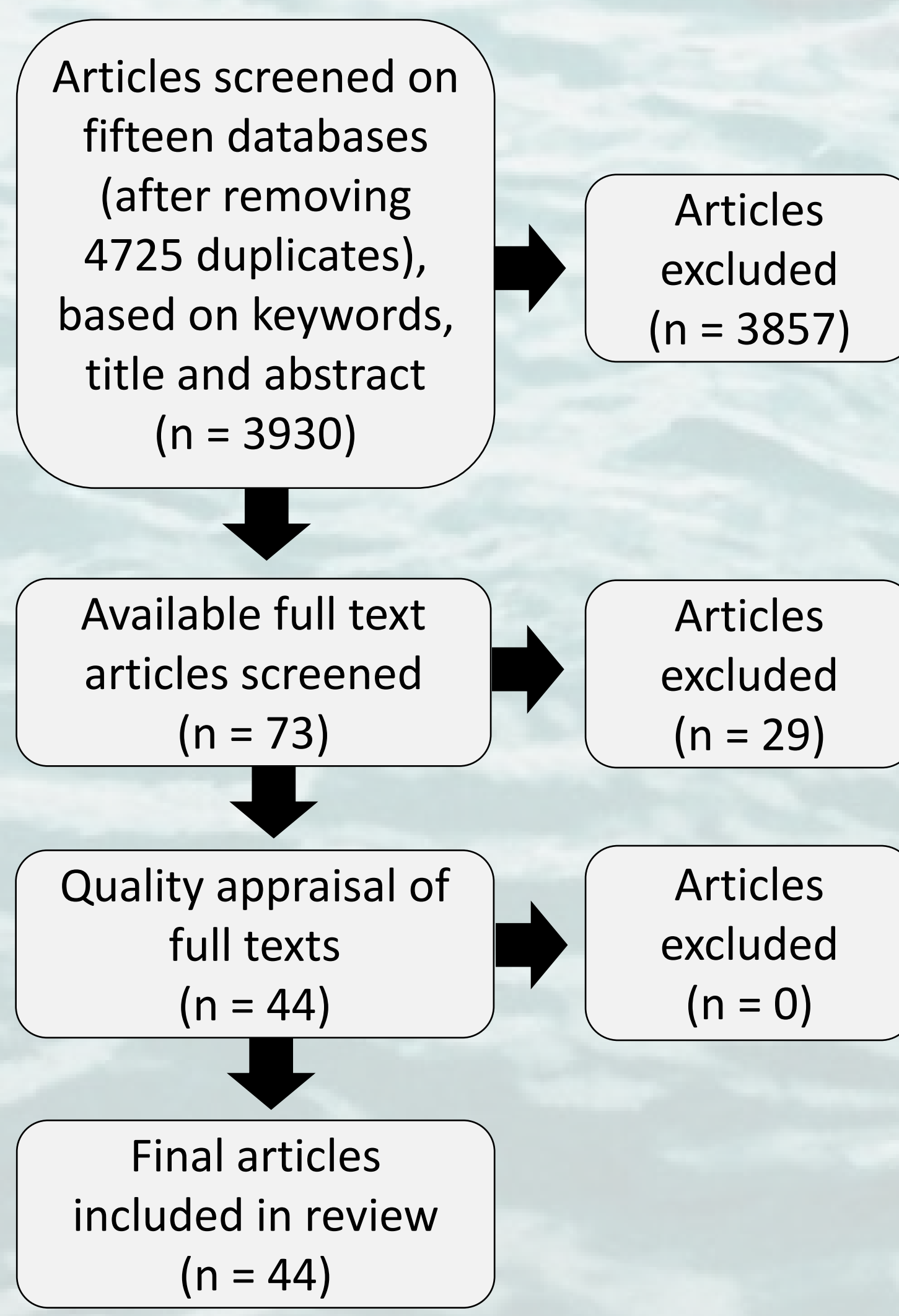
## METHODS

- The reviews followed the PRISMA Guidelines.
- Articles were assessed using a purposively tailored quality appraisal checklist adapted from the MetaQAT framework.
- Included articles (SR1: January 2011 – August 2021; SR2: January 2011 – March 2023) were peer-reviewed and published in English.

## REVIEW 1 (Leavy et al., 2023)



## REVIEW 2 (Crawford et al., 2023)



## REVIEW 1: RESULTS

Twenty-two studies were included. Six studies (27%) assessed changes in drowning rates. Other outcomes included:



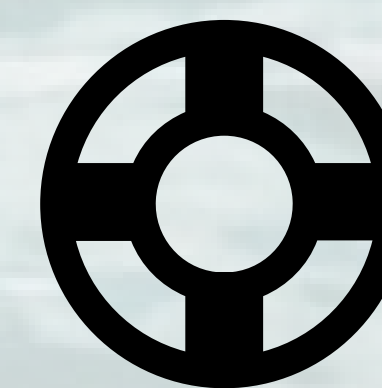
### WATER SAFETY BEHAVIOURS

- Reduced incidence of risky water entry
- Improved lifeguard-looking behavioural



### WATER SAFETY SKILLS

- Improvements in swimming ability
- Simulated rescue competency



### KNOWLEDGE AND ATTITUDES

- Rescue and hazard knowledge
- Improved attitudes towards rescue



### ENVIRONMENTAL

- Increased life jackets and rescue boats
- Increased water safety policy and regulations

## REVIEW 2: RESULTS

Forty-four studies were included. Eight studies (18%) utilised both socioecological and behavioural strategies. Studies are summarised by intervention level and strategy type below:

	INDIVIDUAL	GROUP	POPULATION
BEHAVIOURAL	1	25	8
SOCIO-ECOLOGICAL	0	1	1
MIXED	1	2	5

## CONCLUSIONS

- Findings indicate a small but important increase in the evaluation and publication of interventions to prevent drowning.
- Positive changes have also been identified in the way interventions are designed, delivered and evaluated.
- Findings reinforce global calls for multi-level, multi-strategy approaches to intervention design, implementation and evaluation aligned with contemporary health promotion and prevention approaches.
- Contemporary evidence that identified effective interventions that contribute to prevention efforts is an essential first step in addressing the challenge.

<sup>1</sup> Leavy, J. E., Crawford, G., Leaversuch, F., Nimmo, L., McCausland, K., & Jancey, J. (2016). A review of drowning prevention interventions for children and young people in high, low and middle income countries. *Journal of Community Health*, 41(2), 424–441. <https://doi.org/10.1007/s10900-015-0105-2>

SR1: Leavy, J. E., Gray, C., Della Bona, M., D’Orazio, N., & Crawford, G. (2023). A Review of Interventions for Drowning Prevention Among Adults. *Journal of community health*, 48(3), 539–556. <https://doi.org/10.1007/s10900-023-01189-6>

SR2: Manuscript under preparation.