

# Promoting evidence-informed emergency WASH responses

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## Highlights

### Evidence impact

- The review finding that some commonly implemented emergency water, sanitation and hygiene (WASH) interventions had rarely been studied prompted a partnership of humanitarian agencies – Research for Health in Humanitarian Crises – to fund new research into interventions such as bucket chlorination.
- Review findings also informed the multi-stakeholder Global Handwashing Partnership’s learning resource for implementers, focused on hygiene in emergencies.
- A US-based NGO used review findings to launch a new research initiative to evaluate hygiene kits as an emergency WASH intervention.

### Factors that contributed to impact

- The review's lead researchers serve as leads for the operational research technical working group of the Global WASH cluster, a multi-stakeholder partnership of 77 actors led by UNICEF. In this role, they provide rapid evidence-informed inputs to global organisations working in humanitarian settings, making them trusted sources of knowledge on WASH interventions in emergencies.
- Although there were few direct implications for programming, review authors were able to highlight the limited evidence for commonly implemented interventions and catalyse support for investment in operational research.

## Systematic review details

Title: [Short-term WASH interventions in emergency response: a systematic review](#)

Authors: Travis Yates, Jelena Allen, Myriam Leandre Joseph, Daniele Lantagne

Status : Completed February 2017



## Context

**With the number of humanitarian crises growing, there is an urgent need to address WASH concerns arising from conflicts, disasters and disease outbreaks. Humanitarian responders use WASH interventions to reduce the risk of disease. However, evidence of which WASH interventions work in such emergencies is limited.**

**A 3ie-supported review identified 106 WASH evaluations in 39 countries, testing 13 categories of WASH interventions commonly used in emergencies, including water source treatments, household water treatment, sanitation, hygiene promotion and environmental hygiene. The review focused on quantitative and qualitative studies of populations affected by an emergency in a low- or middle-income country published during 1995–2016.**

## Evidence

**The authors found that water dispensers and water treatment for households, as well as latrines and hygiene promotion, were effective at the recipient level. However, pumping wells flooded**

with seawater was not effective in reducing salinity. The review concluded that there was limited evidence that WASH interventions reduce disease risk, and that communities overestimated the impacts of some interventions, such as household spraying and well disinfection.

Twelve of the 13 categories of interventions were found to be effective, but the authors emphasised that pre-existing socio-cultural conditions and context matter for the real-world effectiveness of WASH interventions. They identified factors such as preferences around taste and smell, trust or fear of implementers, a tendency to overestimate effectiveness and ease of use as affecting the effectiveness of interventions. Approaches that aided intervention success included disseminating simple messages through multiple communication modes, timing interventions carefully, and encouraging community involvement.

The authors found that some commonly implemented emergency WASH interventions, such as bucket chlorination, bulk water treatment, handwashing, household spraying, water trucking and environmental clean-up, had rarely been studied. They found that additional evidence is needed for these interventions, as well as formal economic analysis of all emergency WASH interventions.

## Evidence impacts

### **Helped mobilise new programmes researching WASH interventions in emergencies**

The review's search documents informed a related review focused on interventions responding to disease outbreaks, funded by Oxfam GB's Humanitarian Evidence Programme. Both the reviews have informed a [global priority-setting exercise](#) for research into WASH interventions in emergency settings, as well as evaluations funded by the [Research for Health in Humanitarian Crises group](#). This group includes humanitarian responders and research agencies, such as the United States Office of Foreign Disaster Assistance, Save the Children UK, Médecins Sans Frontières, UNICEF, Oxfam GB, the US Centers for Disease Control and Prevention, and the London School of Hygiene and Tropical Medicine.

The multi-stakeholder Global Handwashing Partnership's Hygiene in Emergencies [learning resource for practitioners](#) cites the 3ie-supported review in order to highlight the importance of context.

### **Helped mobilise funding for research into hygiene kits**

The review finding that commonly implemented WASH interventions, such as hygiene kits, were severely under-researched prompted a US-based alliance called Partnership for Quality Medical Donations to launch [a new programme](#) supporting best practice in hygiene kits distribution, with funding from donors such as Johnson & Johnson. Daniele Lantagne, one of the authors of the review, is leading research into improving hygiene kits as a sub-grantee.

### **Mentioned in rapid review on solid water and fecal sludge management (Type: Inform discussions of policies and programmes)**

The 3ie-funded review has been cited in a Knowledge for Development rapid review on solid waste and fecal sludge management produced by the UK Institute of Development Studies. K4D reviews are "helpdesk reviews" commissioned by the UK government's Department for International Development.

## Suggested citation

**International Initiative for Impact Evaluation (3ie), 2020. *Promoting evidence-informed emergency WASH responses* [online summary], Evidence Impact Summaries. New Delhi: 3ie.**

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