

Occupational Therapy's Role in Disaster Management and Response: A Systematic Review

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Research Question

What is the role of occupational therapy in public health for disaster management and response?

Introduction

Disasters are significant disruptors to health, safety, and participation in activities of daily living, resulting in physical, cognitive, psychosocial, and occupational challenges for affected individuals and communities. Disasters occur through **four stages** described by the **disaster risk management cycle**: prevention and mitigation, preparedness, response, and rehabilitation and recovery (WFOT 2022).

- Occupational therapy providers (OTs) possess expertise that **aligns with disaster risk management needs**, including risk prevention, safety assessment, environmental adaptation, mental health support, and community participation.
- OTs frequently serve **populations most vulnerable** in disasters, including children, older adults, those with disability or chronic illness, cognitive impairments, and mental illness.

Despite this alignment, the role of occupational therapy in disaster remains underrepresented in the literature. This systematic review evaluates the current evidence regarding occupational therapy involvement across the disaster risk management cycle.

Method

Review Process: Followed PRISMA guidelines. Three reviewers participated in the review process and followed PRISMA guidelines.

Date of Search: May 14th to May 28th, 2026

Inclusion Criteria: Peer-reviewed articles with full text available, published in English between 2020-2026, and relevant to occupational therapy involvement in disasters.

Exclusion Criteria: Systematic reviews, scoping reviews, dissertations, conference proceedings, and studies which focused on the COVID-19 pandemic disaster without additional disasters were not included.

Databases Searched: Academic Search Complete, MEDLINE, and CINAHL through Hawai'i Pacific University's online library databases.

Key Words: Disaster recovery, disaster response, disaster preparation, disaster cycle, occupation therapy

Greatest OTs involvement



Figure 1. Occupational therapy providers have the greatest documented involvement in the recovery and rehabilitation stage of the disaster risk management cycle. (Image via Canva.com, with edits by Rebecca Rosenberg OTS).

Results

Of sixty unique articles found, five studies met the inclusion criteria. Articles were assessed for risk-of-bias, level of evidence, and quality.

Studies were divided into **three themes**:

Disaster Phases:

- Level of Evidence: two Level IV studies

Community Networking:

- Level of Evidence: two Level V studies

Occupation Focused Disaster Recovery Intervention:

- Level of Evidence: one Level II study

Discussion

This systematic review suggests that OTs play a valuable role throughout the disaster risk management cycle, with the strongest evidence supporting their role during the rehabilitation and recovery phase (Figure 1).

- Social and community networking** are supportive factors throughout the disaster risk management cycle
- Interprofessional communication** networks which include OTs, emergency response personnel, and other allied health professionals enables disaster preparedness
- Community interventions** which emphasize activities and participation during the disaster recovery and rehabilitation phase are effective and beneficial for survivors of disaster

OTs can assist individuals and communities in the disaster cycle through participation in interprofessional communication networks, by supporting social and community connections in survivors, and implementing community based, occupation focused interventions.

Conclusion

Studies included within this systematic review provide evidence for the effectiveness of the role of OTs in disaster risk management, particularly in the recovery and rehabilitation phase. OTs have training in areas relevant and applicable to disaster risk management, such as promoting social and community engagement, environmental adaptations, activity modification, and addressing barriers of accessibility.

Further research is necessary to develop and investigate the effectiveness of specific intervention guidelines in disaster risk management. Additionally, research into the roles and impacts of OTs in stages of the disaster risk management cycle other than rehabilitation and recovery requires further study.

References

