



Public Health  
England





# Non-radiological health effects of sheltering, evacuation and temporary relocation: literature findings on psychological effects

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# Areas considered

Groups	
	General population
	Residents of hospitals and nursing homes
	Adults living at home, but with medical or care needs (elderly, those with existing illness)
	Children

## Protective actions

Sheltering-in-place

Evacuation

Temporary relocation

## Health effects

Physical effects

**Psychological effects**







# Psychological effects

- 1<sup>o</sup> stressors (radiation) lead to worry about health, home, family, future.
- 2<sup>o</sup> stressors (protective actions) disrupt normal life and breakdown networks.
- Seen following TMI, Chernobyl and Fukushima.
- Many studies demonstrated MH problems after Fukushima.
- Also after English floods 2013/14.
- For people whose homes were not flooded, MH problems among those evacuated seen at twice the rate of those who were not. This shows link between displacement and MH even without primary stressor.









## Psychological effects - sheltering-in-place

Groups			Effects
 General population			Potential for mental stress linked to fear, confusion, or isolation Likely to increase in unfamiliar location or with longer time periods Emotional aspects of separation Challenges of social interactions Perception that not enough is done
 Hospitals/ nursing homes	 Adults with needs	 Children	None reported



## Psychological effects – evacuation & relocation

Groups	Evacuation	Temp. Relocation
General population 	Some risk of psychological issues, especially if evacuation is unplanned.	Risk of developing (or amplifying pre-existing) mental health disorders. Stigma, self-stigma and disaster related suicide may occur.
Hospitals/nursing homes 	None reported.	
Adults with needs 	If evacuation centres/accommodation not suitable for physical needs this can lead to psychological burdens.	
Children 	Stress and risk of PTSD. Increased risks if evacuation takes place during the school day.	Risk of developing mental health disorders. Link with sleep duration. Risk of stigma.



## Findings / Recommendations



- Evacuation, relocation and sheltering-in-place are all viable protective actions.
- All can result in non-radiological health impacts, including psychosocial, which may exceed radiation risks.
- Risks minimised if actions are well planned and not hurried.
- Emergency planning and preparedness is crucial and should include mental health issues.
- Review capabilities for provision of mental health diagnosis, treatment and support, with recruitment and training of staff.
- Some findings not conclusive – more work needed