# INPLASY

## How can we improve initial public response during emergencies?: Recommendations from a systematic review of pre-incident information

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**ADMINISTRATIVE INFORMATION**

**Review Stage at time of this submission -** Completed but not published.

**Conflicts of interest -** None declared.

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**Amendments -** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 23 March 2026 and was last updated on 23 March 2026.

## INTRODUCTION

**R**eview question / Objective This review examines the effect of pre-incident information on public preparedness prior to an emergency or disaster.

**Rationale** Preparing members of the public for adverse events can improve self-sufficiency and improve health outcomes, particularly during periods when emergency responders are not immediately available. This review identifies and appraises recent research that evaluates pre-incident information campaigns relating to public emergencies and disasters and evaluates the efficacy of such campaigns for improving public preparedness for mass emergencies. Specifically, this review aims to identify the types of information that have been found to have practical value and hence should be included in public preparedness campaigns, as well as to identify the information provision methods that are most effective in conveying this information. A previous review was carried out in 2019, this review considers more recent studies following the COVID-19 pandemic, greater public understanding of preparedness for major incidents and the increasing use of immersive technology in education settings.

**Condition being studied** Public preparedness for mass emergencies.

## METHODS

**Search strategy** The Ovid research platform is used to search three databases: Embase, PsychInfo and Medline. Initial paper selection included three focused searches. Search 1 terms related to the timing of information provided, such as "pre-incident", "pre-emergency", and "prior" in order to identify studies in which information was provided prior to the event. Search 2 terms relate to the intervention intention, these include "educat*", "inform*", and "communicat*". Search 3 terms relate to the type of emergency, such as "chemical", "CBRN", "disaster", and "flood". The results of these three searches were combined

using 'AND' logic to obtain the list of papers for review.

**Participant or population** General public.

**Intervention** Pre-incident training or information, aimed to prepare members of the general public for optimum response to an emergency.

**Comparator** Baseline level of preparedness where available.

**Study designs to be included** Controlled trials, longitudinal trials, case studies, cohort trials.

**Eligibility criteria** A paper must:
• examine the effect of pre-incident information on levels of public preparedness prior to an emergency or disaster, whether natural or caused by human action;
• examine the effect of pre-incident information for improving public ability to take effective protective actions during mass emergencies and disasters;
• examine factors that improve the efficacy of pre-incident information;
• include original data, whether qualitative or quantitative;
• be available in English;
• be published in a peer-reviewed journal.

**Information sources**
Embase
PsychInfo
Medline.

**Main outcome(s)** Emergency preparedness, evidenced by confidence, self-efficacy knowledge, awareness, practical skills, personal preparation.

**Additional outcome(s)** n/a.

**Data management** One researcher with primary responsibility for title, abstract, and full-text screening; a second researcher to screen a selection of the papers for consistency. Additional papers screened by a second researcher where there was uncertainty as to whether a particular paper met the inclusion criteria. Approximately 20% of papers to undergo additional screening in this manner at either the abstract or final selection stage.

**Quality assessment / Risk of bias analysis** The Mixed Methods Appraisal Tool (MMAT) was used to critically appraise the methodological qualities of each of the selected papers.
The possibility of cultural bias due to the inclusion criteria of being published in English is acknowledged, as is the potential for publication bias. However, these constraints are felt to be necessary in order to maintain consistency in the screening and analysis process.

**Strategy of data synthesis** Narrative synthesis is employed as this analysis approach yields more meaningful evaluation given the heterogeneity of methodology and results across the included studies which precludes quantitative comparison.

**Subgroup analysis** n/a.

**Sensitivity analysis** n/a.

**Language restriction** Only peer-reviewed papers published in English are considered for inclusion.

**Country(ies) involved** United Kingdom.

**Keywords** pre-incident; training; information; communication; preparation; terrorism; disaster; mass casualty; public health; resilience.

**Dissemination plans** The review is intended for publication in a peer-reviewed journal.

**Contributions of each author**
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