Bibliography of published literature scoped

Emergency Planning in Health: Scoping study of the international literature, local information resources and key stakeholders.

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**Introduction**

This document covers the published academic literature on emergency planning as identified by the scoping study (09/1005/03). It details the search strategy employed, as well as the sifting process by which 1,545 relevant articles were identified and subsequently collated into a database.

Also included in a separate section is a further list of 93 articles not identified by this study, but was identified in a separate NIHR SDO funded study on emergency planning research and development needs by Boyd et al (09/1005/01) that may be of relevance.¹

**Methodology**

The study team initially scoped the various topics likely to be relevant to emergency planning to be used as part of the literature search strategy. The majority of topics identified were derived from the United States Federal Emergency Management Agency (FEMA) Integrated Emergency Management System (IEMS) model. This model describes in greater definition broader thematic categories including hazard analysis, capability assessment, capability maintenance, and development plans, whilst overlapping with themes identified in simpler models. In addition, the team identified further cross-cutting issues such as business continuity, organisational behaviour, communications, surge capacity and bio-security as being potentially relevant to the study.

The final search strategy developed looked for articles in the subject areas of
- Business continuity,
- Hazard analysis,
- Capability assessment and maintenance,
- Recovery,
- Communications/informatics and
- Organisational behaviour/Human Resources.

We searched the electronic databases Embase, Medline, Medline in Process and Psychinfo via Ovid SP, Biosis and Science Citation Index via Web of Science, Cinahl via EBSCO, the Cochrane library via Wiley and Clinicaltrials.gov.

The literature search was not limited to “human” but used a pre-agreed cut-off year of 1990 onwards. Articles relating to non-health emergency planning, non-emergency planning, and non-UK legislative issues, and those from low- and middle-income countries were excluded.

### Table. Literature search strategies

| Business continuity | 1. Disasters/pc  
|                     | 2. (emergency response or emergency preparedness or emergency plan$ or emergency operation plan$ or disaster or major incident$ or incident plan$).ti,ab.  
|                     | 3. 1 or 2  
|                     | 4. (business continuity or organisational resilience or business interruption or adaptive capacity or strategic or coordination).ti,ab.  
|                     | 5. 3 and 4  
|                     | 6. limit 5 to yr="1990 -Current"  
| Hazard analysis     | 1. Disasters/pc  
|                     | 2. (emergency response or emergency preparedness or emergency plan$ or emergency operation plan$ or disaster or major incident$ or incident plan$).ti,ab.  
|                     | 3. 1 or 2  
|                     | 4. (hazard analysis or risk factor or risk assessment or forecasting simulation or modelling).ti,ab.  
|                     | 5. 3 and 4  
|                     | 6. limit 5 to yr="1990 -Current"  
| Capability assessment or maintenance | 1. Disasters/pc  
|                                      | 2. (emergency response or emergency preparedness or emergency plan$ or emergency operation plan$ or disaster or major incident$ or incident plan$).ti,ab.  
|                                      | 3. 1 or 2  
|                                      | 4. (capability assessment or capability maintenance or gap analysis or needs assessment or drill or simulation or preparedness training).ti,ab.  
|                                      | 5. 3 and 4  
|                                      | 6. limit 5 to yr="1990 -Current"  
| Recovery              | 1. Disasters/pc  
|                      | 2. (emergency response or emergency preparedness or emergency plan$ or emergency operation plan$ or disaster or major incident$ or incident plan$).ti,ab.  
|                      | 3. 1 or 2  
|                      | 4. (significant event analysis or serious untoward incident$ or root cause analysis or debrief or organisational learning or rehabilitation).ti,ab.  
|                      | 5. 3 and 4  
|                      | 6. limit 5 to yr="1990 -Current"  

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Table. Literature search strategies - continued

| Communications/informatics                  | 1. Disasters/pc                               |
|                                         | 2. (emergency response or emergency preparedness or emergency plan$ or emergency operation plan$ or disaster or major incident$ or incident plan$).ti,ab. |
|                                         | 3. 1 or 2                                    |
|                                         | 4. (communication$ or mass media or public relations or information system$ or information service$).ti,ab. |
|                                         | 5. 3 and 4                                   |
|                                         | 6. limit 5 to yr="1990 -Current"              |

| Organisational behaviour                 | 1. Disasters/pc                               |
|                                         | 2. (emergency response or emergency preparedness or emergency plan$ or emergency operation plan$ or disaster or major incident$ or incident plan$).ti,ab. |
|                                         | 3. 1 or 2                                    |
|                                         | 4. (community engagement or community involvement or participatory involvement or participatory engagement or consumer participation or organisational behaviour or health personnel or human resources).ti,ab. |
|                                         | 5. **"Attitude of Health Personnel"/         |
|                                         | 6. *Interprofessional Relations/             |
|                                         | 7. 4 or 5 or 6                               |
|                                         | 8. 3 and 7                                   |
|                                         | 9. limit 8 to yr="1990 -Current"              |

2,736 articles were found through the initial literature search. The articles were then de-duplicated, and then assessed (from their titles and abstracts) for relevance. 1,545 articles were found to be either of relevance (subject matter relevant to emergency planning and/or management) or equivocal relevance (subject matter suggestive of relevance to emergency planning and/or management).

The following section is a bibliography of articles deemed to be either of relevance or equivocal relevance.


**Bibliography of published literature scoped**


5. 'Dirty bomb' threat puts spotlight on unprepared EDs: do you have a plan? *ED Manag* 2002;14(9):97-100; suppl 1-4.


© Queen’s Printer and Controller of HMSO 2012. This work was produced by Lee et al. under the terms of a commissioning contract issued by the Secretary of State for Health and Social Care.


110. Bell WC, Dallas CE. Vulnerability of populations and the urban health care systems to nuclear weapon attack--examples from four American cities. *Int J Health Geogr* 2007;6:5.


© Queen’s Printer and Controller of HMSO 2012. This work was produced by Lee et al. under the terms of a commissioning contract issued by the Secretary of State for Health

Project 09/1005/03


343. Fest G. Disaster drill earns top CDC rating [corrected] [published erratum appears in NURSEWEEK (S CENTRAL) 2004 Apr 19;11(9):3]. *NurseWeek* 2004;11(8):5-6.


© Queen’s Printer and Controller of HMSO 2012. This work was produced by Lee et al. under the terms of a commissioning contract issued by the Secretary of State for Health
disease in health emergencies: in the eye of the hurricane. Prev Chronic Dis
2006;3(2):A46.

354. Fordis M, Alexander JD, McKellar J. Role of a database-driven web site in the
immediate disaster response and recovery of Academic Health Center: the Katrina

355. Fothergill A, Palumbo MV, Rambur B, Reinier K, McIntosh B. The volunteer potential

356. Fowkes V, Blossom HJ, Sandrock C, Mitchell B, Brandstein K. Exercises in
emergency preparedness for health professionals in community clinics. J

357. Fox L, Timm N. Clinical practice column. Pediatric issues in disaster preparedness:
meeting the educational needs of nurses--are we there yet? Journal of Pediatric

358. Franc-Law JM, Bullard M, Della Corte F. Simulation of a hospital disaster plan: a

359. Franc-Law JM, Bullard MJ, Della Corte F. Accuracy of computer simulation to predict
patient flow during mass-casualty incidents. Prehosp Disaster Med

360. Franc-Law JM, Ingrassia PL, Ragazzoni L, Corte FD. The effectiveness of training
with an emergency department simulator on medical student performance in a

City's substance abuse treatment programs: a study of program administrators. J

362. Frank IC. More on the emergency response to the Gulf Coast devastation by
hurricanes Katrina and Rita: experiences and impressions. J Emerg Nurs

System for the Triage and Stabilization of Head Trauma and Multiple Injury

364. Freeman KM, Thompson SF, Allely EB, Sobel AL, Stansfield SA, Pugh WM. A virtual
reality patient simulation system for teaching emergency response skills to U.S.

365. Friedman DB, Tanwar M, Richter JV. Evaluation of online disaster and emergency

366. Friedman FD. Public relations in disaster management and planning for emergency

367. Fromer DB, Ablah E, Schrater SR, Molgaard CA, Cook DJ. Pharmacists’ self-
assessments regarding emergency preparedness activities in Kansas. Journal of
Pharmacy Technology 2007;23 (2):75-78.


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Project 09/1005/03


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Project 09/1005/03


549. King C. Reach out and have some fun: Combating isolation in the aftermath of terror: A program for psychiatric patients. *Occupational Therapy in Mental Health* 2006;21 (3-4):129-43.


© Queen’s Printer and Controller of HMSO 2012. This work was produced by Lee et al. under the terms of a commissioning contract issued by the Secretary of State for Health

Project 09/1005/03


612. Laben C. Integration of remote sensing data and geographic information systems technology for emergency managers and their applications at the Pacific Disaster Center. *Optical Engineering* 2002;41(9):2129-36.


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719. Madrid PA, Grant R. Meeting mental health needs following a natural disaster:

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Project 09/1005/03

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750. Mason RO. Lessons in Organizational Ethics from the Columbia Disaster: Can a culture be lethal? *Organizational Dynamics* 2004;33(2):128-42.


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786. McSwain N, Jr. Disaster preparedness perspective from 90.05.32w, 29.57.18n. *Crit Care* 2006;10(1):108.


© Queen’s Printer and Controller of HMSO 2012. This work was produced by Lee et al. under the terms of a commissioning contract issued by the Secretary of State for Health

Project 09/1005/03


880. Nocera A. Australian major incident nomenclature: it may be a 'disaster' but in an 'emergency' it is just a mess. *ANZ J Surg* 2001;71(3):162-6.


© Queen’s Printer and Controller of HMSO 2012. This work was produced by Lee et al. under the terms of a commissioning contract issued by the Secretary of State for Health


942. Parker SE, B. Organizational learning, innovation, and employees' mental models of change following a disaster: A case study of the Morgan Library at Colorado State University. Capella U., 2008.


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993. Pockett R. Learning from each other: the social work role as an integrated part of the hospital disaster response. *Social Work in Health Care* 2006;43(2-3):131-49.

995. Poles L. [The Israeli medical response plan for an unusual biological event]. Harefuah 2002;141 Spec No:22-8, 123, 22.


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1091. Romano M. At capacity and beyond. Ideas such as 'surge' hospitals are getting a more careful look as healthcare wrestles with planning for large-scale disasters. Mod Healthc 2005;35(39):6-7, 16, 1.


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Project 09/1005/03


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1182. Searle NS, Writing Committee. Baylor College of Medicine's support of Tulane University School of Medicine following Hurricane Katrina. *Acad Med* 2007;82(8):733-44.


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1366. Tsai CH, Chen CW. An earthquake disaster management mechanism based on risk assessment information for the tourism industry-A case study from the Island of Taiwan. *Tourism Management* 2010;31(4):470-81.


© Queen’s Printer and Controller of HMSO 2012. This work was produced by Lee et al. under the terms of a commissioning contract issued by the Secretary of State for Health

Project 09/1005/03


1435. Walker-Cillo G. Bioterrorism! We put our plan to the test. RN 2006;69(4):36-42.


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Bibliography of additional literature identified by Boyd et al.²


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34. Duffin C. Coping with on-site fires is burning issue for managers. *Nursing management* 2009;16(8):7.


40. House T, Hall I, Danon L, Keeling MJ. Contingency planning for a deliberate release of smallpox in Great Britain--the role of geographical scale and contact structure. *BMC Infect Dis* 2010;10:25.


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87. West D. Review finds £1.2bn swine flu effort 'proportionate'. *Health Service Journal* 2010. Available at: [http://www.hsj.co.uk/topics/swine-flu/review-finds-12bn-swine-flu-effort-proportionate/5016695.article](http://www.hsj.co.uk/topics/swine-flu/review-finds-12bn-swine-flu-effort-proportionate/5016695.article)


