

Institution: University of Cumbria
Unit of Assessment: 17- Geography, Environmental Studies and Archaeology
Title of case study: Taking account of the human implications of catastrophic events in policy and practice
<p>1. Summary of the impact</p> <p>The research undertaken on the 2001 Foot and Mouth Disease epidemic as a major natural, environmental and human disaster in the UK has changed the approach to managing such catastrophic events. By exploring a full range of interrelated political, technological and socio-cultural contexts of such events, it refocused and refined policy understanding and approach to managing similar disasters at both national and international level, by raising the profile of accounting for the personal, psychological and community impacts as well as the practical implications of such events.</p>
<p>2. Underpinning research</p> <p>The research into the Foot & Mouth Disease (FMD) epidemic took place between 2001 and 2004. Whilst initiated at Lancaster University, the work was continued (from 2003) by a member of the research team whilst employed at the University of Central Lancashire (UCLan). This research area of UCLan and its campus location at Newton Rigg, Penrith, was transferred in its entirety to become an integral part of the University of Cumbria on its formation in 2007.</p> <p>The research demonstrated the epidemic was a disaster for large numbers of rural people. Research involved engagement with those affected by the crisis, via interviews and weekly diaries, providing data across a period of over 18 months. The testimonies of this group of ‘ordinary citizens’ was systematically analysed and provided insight into the experience of living with and through the epidemic, and evidence of the effects of the epidemic across a wide range of occupational groups. It made recommendations for policy and practice which emanated directly from the longitudinal data and from the process of synthesising different evidence types. At the time, this was a highly innovative, interdisciplinary approach, which has since been used by a number of other studies, such as the 2007 Hull Floods Research cited in section 4.</p> <p>The research was covered extensively by the press (national and international media). The team also produced ten issues of ‘The Diarist’ newsletter between March 2002 and December 2003, to share news, events, information about useful organisations and project developments. Respondents were invited to make their own contributions or comments to the newsletter. FMD research staff and project participants presented to the EU temporary committee on FMD Inquiry meetings at Gretna and Kendal (18 and 22 April 2002 respectively), providing evidence of the social impacts of the outbreak. A participant led project conference at Carlisle Racecourse on 14 October 2002 also helped to engage other stakeholders in the social and psychological impacts of the events, through the presence of experts including local MPs, Government Agencies, NGOs and Professor Kai Erikson of Yale University.</p> <p>Key research insights were:</p> <ul style="list-style-type: none"> • The FMD epidemic was a human tragedy in ways not previously acknowledged or fully understood prior to the research, although it was commonly acknowledged as a ‘disaster’. • Demonstration that local knowledge and expertise is vital in [any type of] disaster situation. • Many human reactions to the disaster, such as experiencing of flashbacks; emotional triggers; life now measured by pre and post FMD events; irretrievable loss; anxiety about new problems, are <i>normal reactions to abnormal events</i>. • For those working in disaster situations guided de-briefing and peer support can be an important and effective way of managing stress and trauma. • Sense of place was altered – everyday experiences/journeys took on new meanings. • The relationship between people and animals is multi-faceted and complex. <p>The project took place between 2001 and 2004. The research team was Maggie Mort (Senior Lecturer), Ian Convery (Research Associate/Lecturer), Cathy Bailey (Research Associate) and Josie Baxter (Research Associate) from the Institute for Health Research (IHR), Lancaster University and Geography Department, UCLAN Penrith (which in 2007 become part of the University of Cumbria). Dr Convery worked at IHR until August 2003, at which point he joined UCLAN as a Lecturer and continued to work on the FMD research. Dr Convery is now Reader in</p>

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Conservation and Forestry.

3. References to the research

- **Convery I.**, Bailey C., Mort M., Baxter J. (2009) Altered Lifescapes. Chapter in Döring M & Nerlich, B. (Eds.) *'From Mayhem to Meaning': The cultural meaning of the 2001 outbreak of foot and mouth disease in the UK*. Manchester University Press.
- **Convery I.**, Mort M., Bailey C., & Baxter J. (2008) *Animal Disease & Human Trauma*. Basingstoke: Palgrave Macmillan.
- Mort, M. **Convery, I.** Baxter, J. & Bailey, C. (2008) Animal disease and human trauma: the psycho-social implications of the 2001 UK Foot & Mouth Disease disaster. *Journal of Applied Animal Welfare Science*. Vol. 11, 2, pp. 133-148.
- **Convery I.**, Bailey C., Mort M., Baxter J. Death in the Wrong Place? (2005) Emotional Geographies of the UK 2001 Foot and Mouth Disease Epidemic. *Journal of Rural Studies* Vol. 21, pp.99–109.
- Mort M., **Convery I.**, Bailey C. & Baxter J, (2005) Psychosocial effects of the 2001 UK foot and mouth disease epidemic in a rural population: qualitative diary based study, *British Medical Journal*, Vol. 331, pp.1234-1237
- **Convery I.**, Mort M., Bailey C., & Baxter J. (2008) *Animal Disease & Human Trauma: The Emotional Geographies of Disaster*. Basingstoke: Palgrave Macmillan.
- **Convery I.**, Mort M., Bailey C., & Baxter J, (2007) Role Stress Role Stress in Front Line Workers during the 2001 Foot and Mouth Disease Epidemic: the value of therapeutic spaces. *Australasian Journal of Disaster and Trauma Studies* Vol. 2007-2.
- Bailey C., **Convery I.**, Baxter J. and Mort M. (2006). Different public health geographies of the 2001 foot and mouth disease epidemic: 'citizen' versus 'professional' epidemiology. *Health & Place*, Vol. 12, pp.157-166
- **Convery I.**, Baxter J., Mort M. (2004) 'Narratives of trauma and on-going recovery: the 2001 foot and mouth disease epidemic' *AutoBiography* Vol. XI, pp.37-45

As an indicator of quality, the research was selected to be archived by the Economic & Social Data Service (ESDS), which has subsequently been integrated into the UK Data Service. The quality of the work is also shown in the engagement from the noted disasters expert Professor Kai Erikson of Yale University, who participated in stakeholder conferences during the research, and subsequently provided the foreword to the 2008 book.

The research was funded by the Department of Health through a £259,000 grant to IHR at Lancaster University through the Policy Research Programme, entitled 'The health and social consequences of the 2001 foot and mouth disease epidemic in North Cumbria: an action research project'. Maggie Mort was Principal Investigator, and Ian Convery was co-applicant. The grant period was from 01/11/2001 to 28/02/2004.

4. Details of the impact

The research made eight key recommendations, which were developed directly from the research insights:

1. It is necessary to develop a non-pathological understanding of trauma to manage environmental disasters effectively.
2. Health, social care and voluntary organisations need to jointly review what qualifies as a disaster and how this is recognized, and develop ways of sharing 'intelligence' about needs.
3. Enhanced outreach working initiatives in rural areas would help alleviate some of the ongoing problems resulting from poor access during the disaster.
4. Agencies that employed front-line workers should make a record of skills and expertise acquired, and ensure ways to access this in future.
5. Positive regular mental health promotion for workforces should have higher priority within the larger organisations, and be available also for sub-contractors.
6. There should be a greater emphasis on guided de-briefing models and peer support, rather than stigmatising or pathologising approaches.
7. There should be greater community involvement in disposal site management and contingency planning more widely.

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8. Post disaster regeneration support needs to be simplified, made more accessible and have less stringent/punitive eligibility criteria.

Through considerable dissemination of the research findings and the recommendations made for handling environmental disaster, there has been an impact both on the efficacy of the management of such crises (e.g. through studies of subsequent crises) and on the understanding at national and international level of disaster management. The latter includes direct influence on the UK policy framework for disaster management, and on the training provided to relevant professionals.

The 2008 book has been a key element of international reach, with strong hard copy sales for this type of output (UK: 75; Export (ex N America): 50; and N America: 75). The book is also available as an e-book via Palgrave Connect and e-book libraries. A review in *Environment and Planning* (Vicente Rodriguez) concluded that the book was '*...a valuable contribution to the literature on disasters*'. This is reflected in the fact that the book is held in the Cabinet Office Library, and is used as a training resource at the Emergency Planning College, a governmental institution which is part of the Civil Contingencies Secretariat (CCS) of the Cabinet Office. Specifically, the book is recommended reading on courses related to disaster planning, which train private and public sector workers from the UK and abroad on crisis management.

During the project Dr Convery gave briefings at DEFRA and the Department of Health in London, and on-going dissemination and contact with policy makers has led to further influence, such as the research informing the 2011 FMD Control Strategy (www.defra.gov.uk/publications/files/fmd-control-strategy111128.pdf). The research contributed directly to the understanding of social and psychological factors and response capabilities through a "*gradual recognition and adaptation taking a broader focus to control reflecting the complexity and with positive improvements in our approach that address some of the issues in [the FMD] research*", and "*since the last major outbreak in 2001 (and supported by your work) government recognises that there are social and economic impacts arising from any disease incidence... We are much more aware of the social impacts and the need to work through those trusted rural intermediaries to provide support to reach those farmers affected*" (quoted from an acknowledgement from DEFRA in an email from a Social Researcher, Food and Farming Group, and member of the Advisory Group at Defra, in an email to Maggie Mort (May 2012).

The FMD research has also had influence at European level through the CapHaz-Net Project (<http://caphaz-net.org/>), a major EU Framework Programme 7 research project in which Lancaster University were a partner. The project mapped and analysed research with regard to developing a better understanding of the social dimensions of 'natural' hazards and disasters. The underpinning research helped to shape the initial project, and helped frame the project as assessing the social aspects of disaster management. Dr Convery contributed directly to the project, through participation in the Social Capacity Building and Risk Governance work package workshop held at Lancaster University in 2009. Cap-Haz has produced a series of policy briefs in relation to social capacity building in the management of natural hazards in Europe.

There was also collaboration with The Institute of Rural Health in Wales during 2002-2004 in terms of arranging community conferences and meetings. The research also generated media coverage: in early October 2005, coinciding with the publication of a paper in the *British Medical Journal*; there was intense media interest in the FMD research (including online, radio, television and newspaper coverage, national and international). As an example, Dr Convery was interviewed by Radio Cumbria, Radio Wales, Nicky Campbell breakfast show Radio 5 Live, ITV Central and Border TV (all 7/10/05). This aspect of dissemination has helped to raise public awareness of the social effects of such disasters.

The relevance of the research in terms of minimising and mitigating the effects of such disasters is shown in wider media interest and dissemination of the work. Examples include Dr Convery participating in conference in Nova Scotia which specifically addressed the issue of animal disease in the North Atlantic region of Canada as an invited speaker (Convery, I., (2007). *Animal Disease and human trauma* at the North Atlantic Biorenaissance Group, Nova Scotia Agricultural College,

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Canada, November 2007). Dr Convery has also been interviewed on a number of occasions by local news organisations as an expert on disaster issues. Most recently he was interviewed by ITV News (Borders) for their early evening news programme regarding the 2010 earthquake in Haiti. The FMD research was also the subject of a Chinese State TV documentary in 2011, with both researchers and participants interviewed for the film. There are currently plans for the 2008 book (Convery *et al.*) to be translated into Chinese and Korean.

The deposit of the research within the ESDS/UK data archive is seen as highly successful, having been reused and influencing training and seen as best practice in collection and management of data, including use by the UK Data Archive Data Management Team in training (including workshops and a forthcoming publication). The research approach has also informed subsequent disasters research, including a major Economic and Social Research Council, Engineering and Physical Sciences Research Council and Environment Agency funded research project at Lancaster University to investigate the 2007 Hull Floods (Whittle *et al.* (2010) *After the Rain – learning the lessons from flood recovery in Hull*, final project report for “Flood, Vulnerability and Urban Resilience: a real-time study of local recovery following the floods of June 2007 in Hull”, Lancaster University, Lancaster, UK) directly cites that the methodology was derived from and adapted the diary based approach from the FMD study. This report included recommendations to include local consultation in flood management decisions in its response to a related government consultation, which resulted in the Flood and Water Management Act 2010, and which includes provision for Regional Flood and Coastal Committees to agree and enact regional strategies.

The Hull Floods research, through the community approach which was based on the FMD study, has had a significant impact on UK policy for the management of non-flooding disasters. For example, a member of the research team sits on the Community Resilience Programme Steering Group (active since 2009), thus enabling the project’s findings to be fed into the development of the draft Strategic National Framework for Community Resilience and research staff have presented at the Cabinet Office Recovery Capability Board. In this way the FMD work was an important first step in legitimizing participatory research approaches in disaster management and planning, and the uptake of community led approaches to management which acknowledge the social and emotional impacts of such events as key elements of recovery, in addition to operational and economic aspects.

5. Sources to corroborate the impact

Impacts via the Hull Floods Research:

- <http://www.lec.lancs.ac.uk/cswm/Hull%20Floods%20Project/AFTER%20THE%20RAIN%20FINAL%20REPORT.pdf> corroborates the use of the FMD research methodology.
- <http://www.legislation.gov.uk/ukpga/2010/29/resources> corroborates changes created by the Flood and Water Management Act 2010, including community engagement through regional committees.

Individuals to contact for corroboration:

- Associate Course Director at the Emergency Planning College, to corroborate use of the book in training for disaster management.

Statements for corroboration:

- Manager of the Research Data Management Team at the UK Data Service, to corroborate reuse of the data set and implications for best practice and influence on practice (email).
- Social Researcher, Food and Farming Group & member of the Advisory Group at Defra, to corroborate impact on UK government approach to managing similar disease outbreaks and FMD contingency plans (email to Principal Investigator).

<http://www.assemblywales.org/sub-ld8472-em-e.pdf> link to Explanatory Memorandum to the Badger (Control Area) (Wales) Order 2011 (Wales Assembly)