



Policy and disease containment strategies in FMD: Living with uncertainty

29 September 2010 workshop

Universities of Liverpool and Lancaster, United Kingdom

Lost in Translation

A cross-disciplinary analysis of knowledge exchange and effectiveness in animal disease management

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Research Context

- Our project: collaboration between Liverpool and Lancaster Universities
- Our team: involves sociologists of health and science, human geographers, as well as veterinary, soil and water scientists
- Three year project – first phase: problem framing, developing shared expectations and common language. Initial consultation with an external advisory group

Project aims

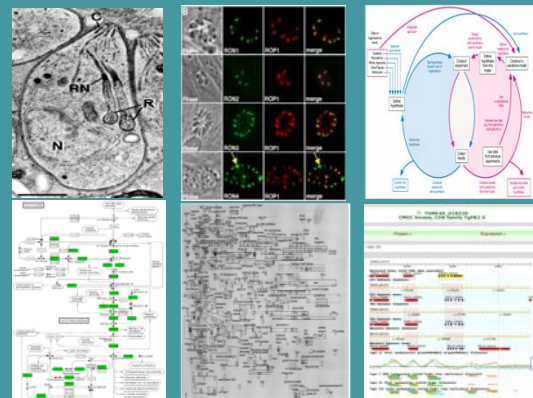
The project addresses two main issues:

- How we can understand better the issues of complexity and uncertainty in animal disease management strategies
- Why particular technical developments have been adopted and not others in the deployment of strategies of containment

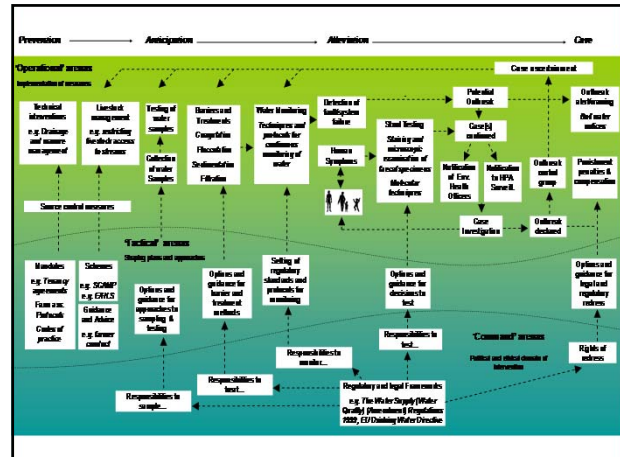
Research strategy

- Semi-structured interviews with experts at the strategic, tactical and operational levels (approx 50 interviews with stakeholders and experts)
- Disease specific workshops addressing areas of uncertainty identified from interview data
- Analysis of secondary data (existing archived material)

Complexity and uncertainty and the molecular and cellular level



A different form of complexity and uncertainty!



Is there a plan?

(Jeff Hammond – this meeting)

Contingency
Plan for
Exotic
Animal
Diseases
Framework
Response Plan
December 2008
www.defra.gov.uk



Science and technological uncertainties

Example focuses:

- Development and application of **modelling techniques** within surveillance and control of disease: FMD and AI
- Powerful tools (attractive to policy-makers)
- Appear to summarise a problem
- But can mask uncertainties and often poorly understood by non-modellers

Primary project focus is on making sense of uncertainties at the **operational** and **tactical** end of containment, and in particular, contexts in which the application of **science and technology** is an important area of innovation...

Foot and Mouth

Cryptosporidiosis

Avian Influenza

- What do S.o.Cs involve people doing and why do they do these things?
- Which aspects of S.o.Cs are perceived to work? And which aren't?
- What matters and what might change?
- What steps should be taken to realise more effective forms of disease governance?

Disease focus

- Cross-disease analysis with a focus on current and emerging practice in three disease areas:

– Avian Influenza

– *Foot and Mouth Disease*

– *Cryptosporidiosis*

Workshop aims and objectives

- The workshops form an important stage in the process of the analysis, assessing:
 - The relevance of the identified themes
 - Gaps in the identified themes
 - Their validity, scope and completeness with reference to Avian Influenza
 - Relative importance/priorities for the future
 - Cross-disease containment strategies - the wider context.

Avian Influenza Workshop , Oxford, September 2010



Activity 1

- Examination of themes of uncertainty identified by experts
- Additional themes and comments

Process: Identifying cross disease themes

Step 1: Open coding
Read through interview transcripts marking 'significant' and recurrent issues and assign these into 'codes'

Step 2: Data refinement
Discuss and refine codes with research team, and group into substantiated 'themes'

Process: Identifying cross disease themes, steps 1 and 2: example

Quotes:

A number of quotes were identified relating to uncertainties and dispute surrounding the development of technologies for use within the animal disease strategy

Open codes:

Cost of developing new technology may be prohibitive

Lack of sharing of data/samples e.g. Difficulty obtaining samples from some parts of the world could decrease the speed of response to newly emerging strains

Ethical uncertainty and practical difficulties in ensuring that all countries benefit from isolate sharing

Theme:
"Development of new technologies"

Theme	Cryptosporidium	FMD	AI
Role and expertise of individual (T1)			
Media Coverage (T2)			
Political Will/Motivation (T3)			
Funding (T4)			
Priority given to Disease (T5)			
Changes in Regulation (T6)			
Research & Development (T7)			
Role of Industry (T8)			
Role of Animal and Land Management (T9)			
Stakeholder Role (T10)			
Development of new technologies (T11)			
Use of new & existing technologies (T12)			
International Differences in regulation (T13)			
Human Behaviour (T14)			
Underlying objectives of outbreak response (T15)			

"New tools and challenges for progressive control"

Open Session of the EuFMD Research Group, Vienna (Austria) 29 September - 1 October 2010

Rough data!



Activity 2

- Importance and likelihood of themes

Process: Identifying cross disease themes

Step 1: Open coding

Read through interview transcripts marking 'significant' and recurrent issues and assign these into 'codes'

Step 2: Data refinement

Discuss and refine codes with research team, and group into substantiated 'themes'

Step 3: Consultation

Themes discussed with stakeholders within disease specific workshops. Relevance and importance as well as missing elements are assessed.

Step 4: Final stages

Once themes have been reviewed and then the interview transcripts re-visited, relationships between themes can be established and assessed further

Programme

Time	Session
11.30	Group discussion on the relevance of themes and where there might be gaps
	<i>Tea/coffee</i>
12.30	Session 1. Critical review in groups of content of themes: Avian Influenza
13.15	<i>Lunch</i>
14.00	Session 2. Discussion in groups of relative importance of themes and scoring exercise
14.30	Revisit issues of uncertainty and technological development Concluding remarks. Cross-disease context and priorities for the future.
15.00	Close

Discussion: Identifying cross disease themes

- Are all of the themes relevant?
- Have we missed any?

Session 1. Critical review of content and importance of themes: Avian Influenza