



Better Training for Safer Food BTFSF

Disease Outbreak Management

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BETTER TRAINING FOR SAFER FOOD

BTSF

Disease Outbreak Management

Outline

- **Control and Eradication at Farm Level**
- **Operation of a Local Disease Control Centre (LDCC)**
- **Operation of a National Disease Control Centre (NDCC)**
- **Management of Animal Movements and Trade Restrictions**
- **Use of Epidemiological Models**
- **Cooperation with Other Government and Non-government Organizations**
- **Role and Involvement of SCFCAH**

Control and Eradication Measures at Farm Level

Example Council Directive 2003/85/EC

Suspicion (Art. 3,4,6)

Confirmation (Art. 10,11,12)

Epidemiological Inquiry (Art.13)

Valuation

Killing and Disposal

Cleansing and Disinfection (Annex IV)

Waiting Period

Controlled restocking (Annex V)

Lifting Restrictions



Suspicion

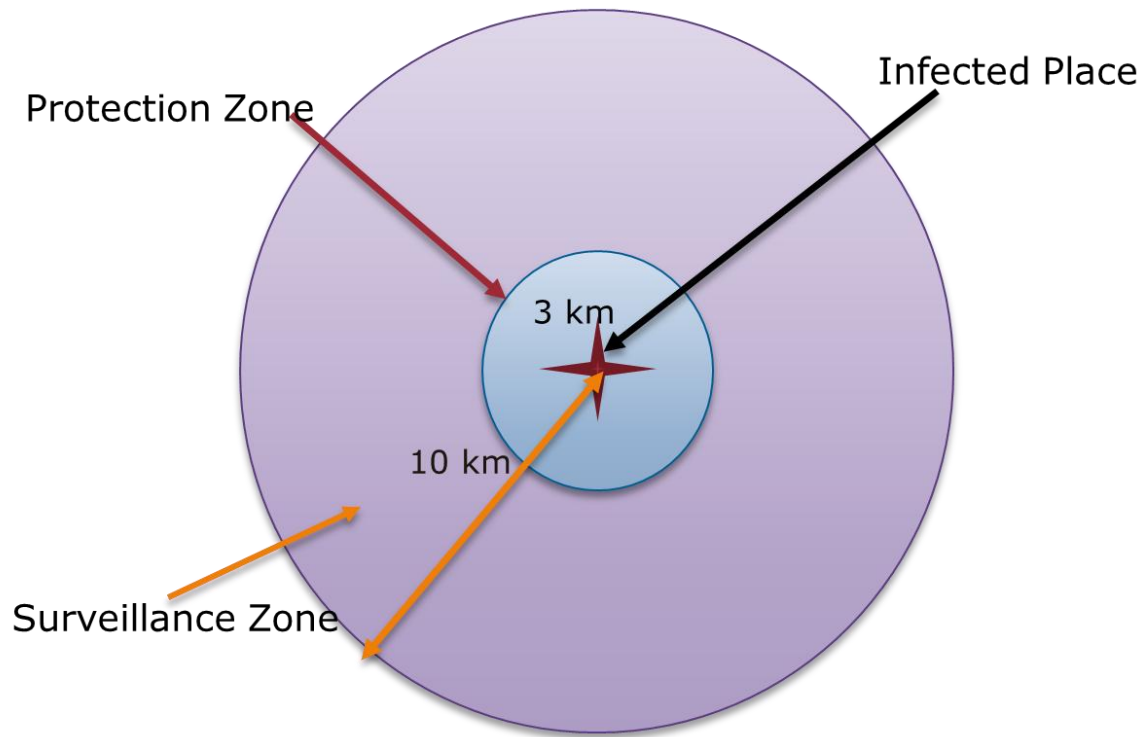
- *Place holding (dwelling house?) under official control*
- *Prohibit movement of people, vehicles, things, animals and animal products on to and off the holding*
- *Carry out official investigation*
 - **History**
 - **Examination (“Up Close and Personal!”)**
 - **Samples**



Epidemiological Inquiry (Art. 13)

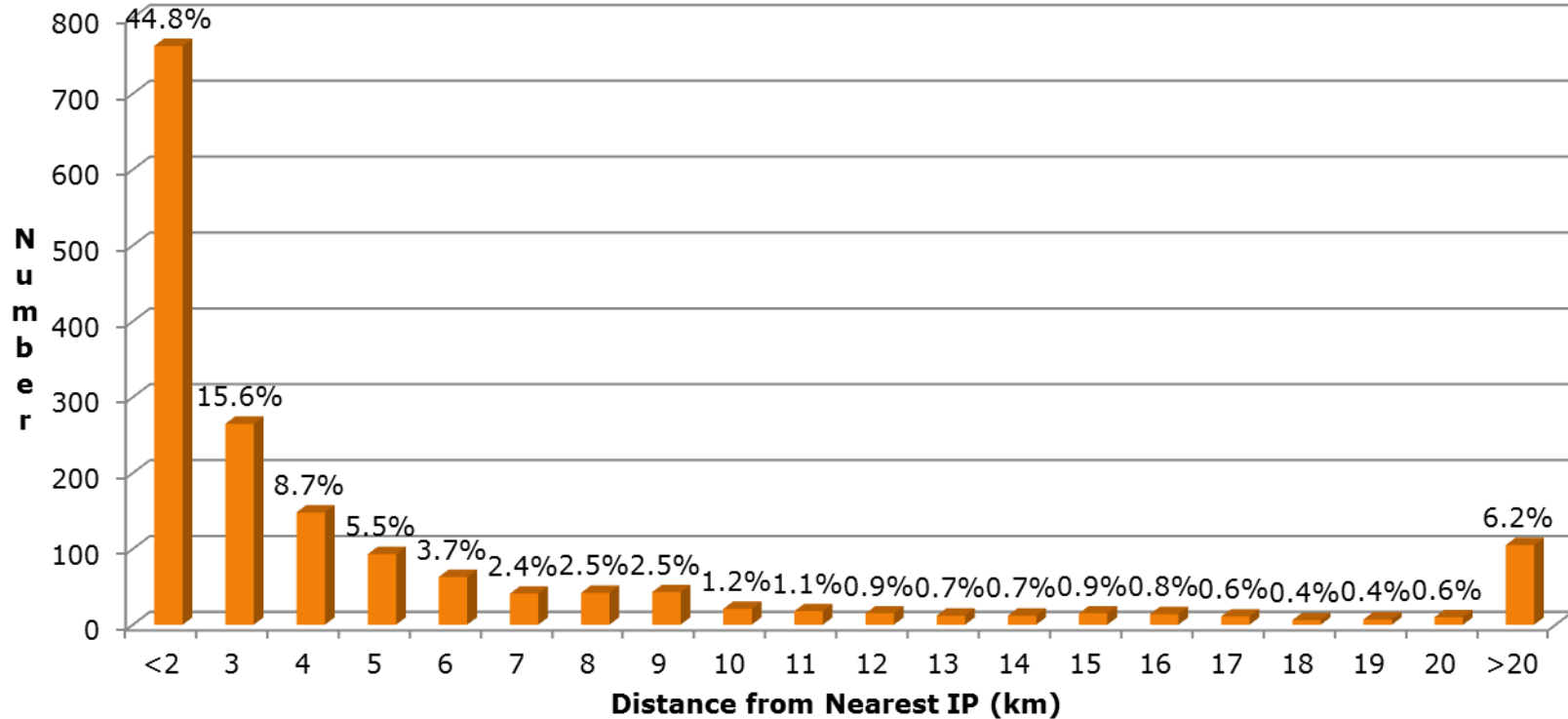
- *Pre-prepared questionnaires*
- *Sensitive Questioning and Listening (may take time)*
- *Trained expert veterinary knowledge, skills and experience*
- *How long has disease been present*
- *Possible origin and likely spread from same source*
- *Other susceptible animals*
- *Persons, vehicles and things that may have carried infection to and from the premises*
- *Share information - SCFCAH*

Minimum Area Controls – on confirmation of disease



Distribution of the distance of an IP* from the nearest IP with clinical signs in the previous 0 to 7 days (n = 1,704)

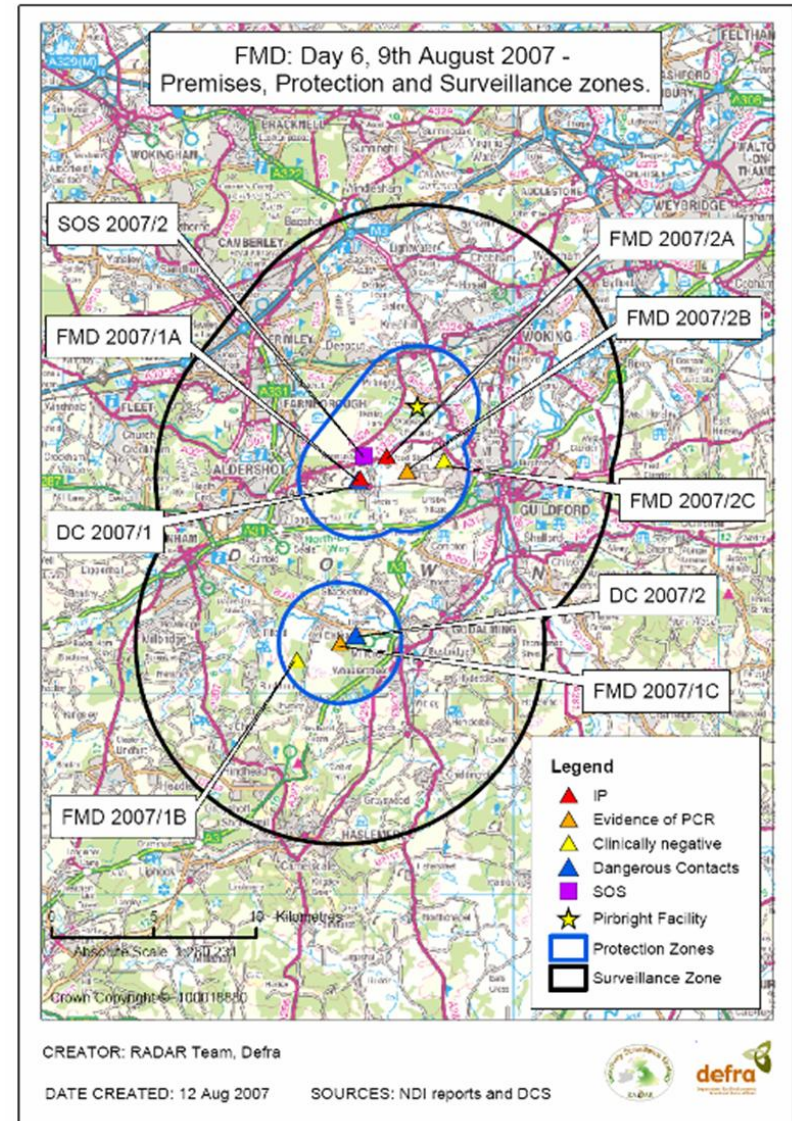
* Infected Premises



FMD UK 2001

Protection and Surveillance Zones

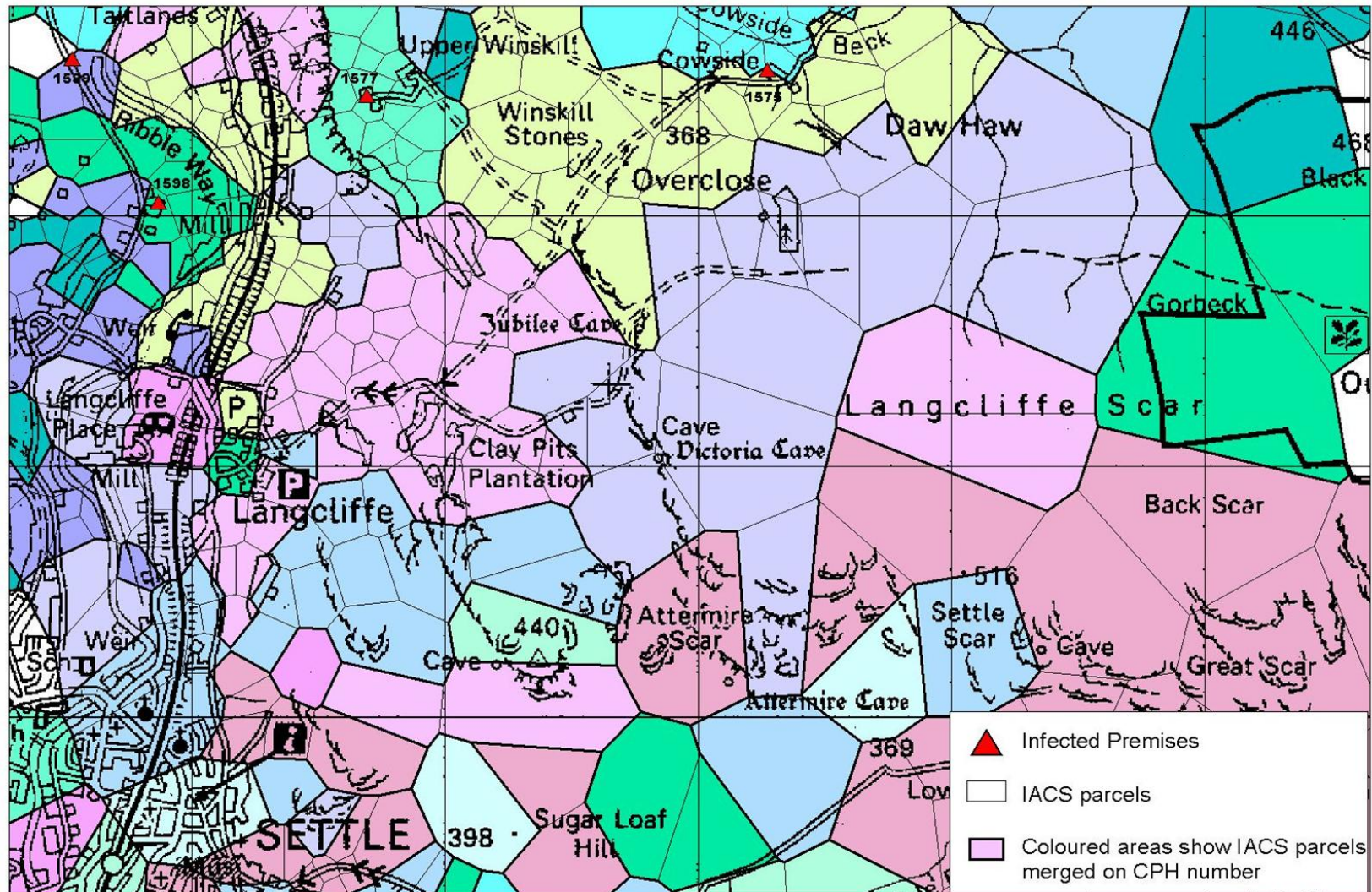
- *Setting the Boundaries*
- *Mapping and Holding DBs*
- *Common grazing*
- *Census*
- *Inspection/examination*
- *Movement controls*
- *Product controls*
- *Roads*
- *Slaughterhouses within the zones*
- *Welfare issues*





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Map illustrating IACS parcels grouped on CPH number





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Defra, UK - Animal health & welfare - Disease surveillance & control - Notifiable diseases - Av - Microsoft Internet Explorer p

File Edit View Favorites Tools Help

Address: http://www.gisdiseasemap.defra.gov.uk/intmaps/avian/map.jsp?megalURL=http://www.gisdiseasemap.defra.gov.uk/output/avian2007111912_DCSGIS/2702862042323.png?bbox=593294,933589303,280536,2437 Go Links »

defra Animal health and welfare
Home | Contact Defra | About Defra | News | Access to information | Links | Search | Site A-Z

Avian Influenza (Bird Flu): Interactive map

Avian Influenza Homepage

Interactive map

- > How do I use the map?
- > What does it show?

Search

Place name, postcode or map reference:

[Expand Search](#)

Restrictions

- Avian Influenza H5N1 Protection Zone
- Avian Influenza H5N1 Surveillance Zone
- Avian Influenza H5N1 Restricted Zone

Click on the map to:

- Zoom in
- Display local Animal Health Divisional Office information

Smaller Map

Zoom Out Zoom In

Any general enquires regarding Avian Influenza should be made to the Defra Helpline: 08459 335577. For active or suspicious Avian Influenza related matters local AHDO.

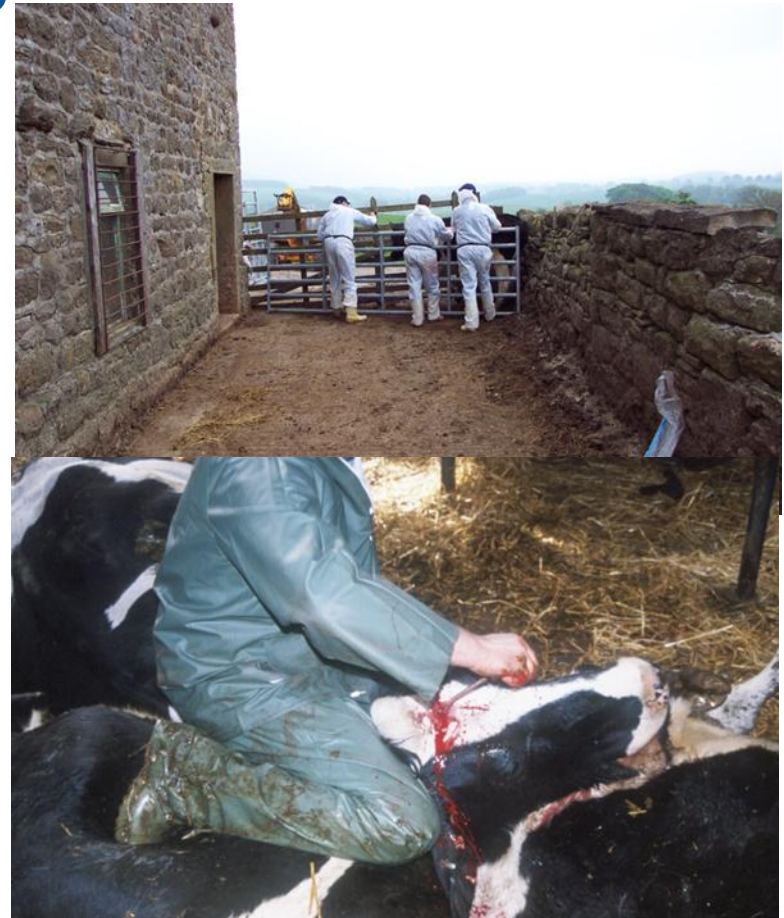
Please note that scheduled maintenance will take place some time after 17:00 for up to 45 minutes this evening. The map will be unavailable at this time.

Current Map Scale is 1: 40000



Valuation and Killing

- *Health & Safety Assessment*
- *Must be Killed as quickly as possible (Excreting animals first)*
- *Affected animals destroyed immediately*
- *Valued at market prices beware of Fraud*
- *Compensation paid within 14 days*





COUNCIL REGULATION (EC) No 1099/2009 Protection of Animals at the Time of Killing

Depopulation Art.18

- **Contingency Plan, Action Plan and SOP for Compliance with Regulation Before Operation commences**
- **CA to take any appropriate action to safeguard the welfare of the animals in the best available conditions**
- **“....in exceptional circumstances, the competent authority may grant derogations from one or more of the provisions of this Regulation where it considers that compliance is likely to affect human health or significantly slow down the process of eradication of a disease”**
- **Annual Report to Commission**

Disposal (UK Hierarchy) (Environmental Protection)

Licensed Incineration

Licensed Rendering

Licensed Landfill

Mobile on farm Air Curtain Burners

On Farm Pyres & Burial

Cleansing and Disinfection (Annex IV)

- *Preliminary disinfection*
- *Thorough cleaning*
- *Two final disinfections and degreasing one week apart*
- *Problems - slurry, dilapidation*
- *Detailed guidance Annex IV 2003/85/EC*



Controlled Restocking

- *Use of sentinel animals*
- *Introduce sentinels 21 days after final cleansing and disinfection (if not in a surveillance or protection zone)*
- *Expose sentinels to high risk areas on premises*
- *Monitor for FMD after 15 days, weekly inspection*
- *After 28 days clinical inspection – blood test sheep and goats. If clear, start restock*
- *Detailed Guidance Annex V EU Directive 2003/85/EC*

Organisational Structures

The examples given are from the UK. They are only examples. Organisational structures will vary from Member State to Member State. They will depend on:

- **Government Structures**
- **Tiers of Government and their roles and responsibilities and their legal authority**
- **Operational Partners**

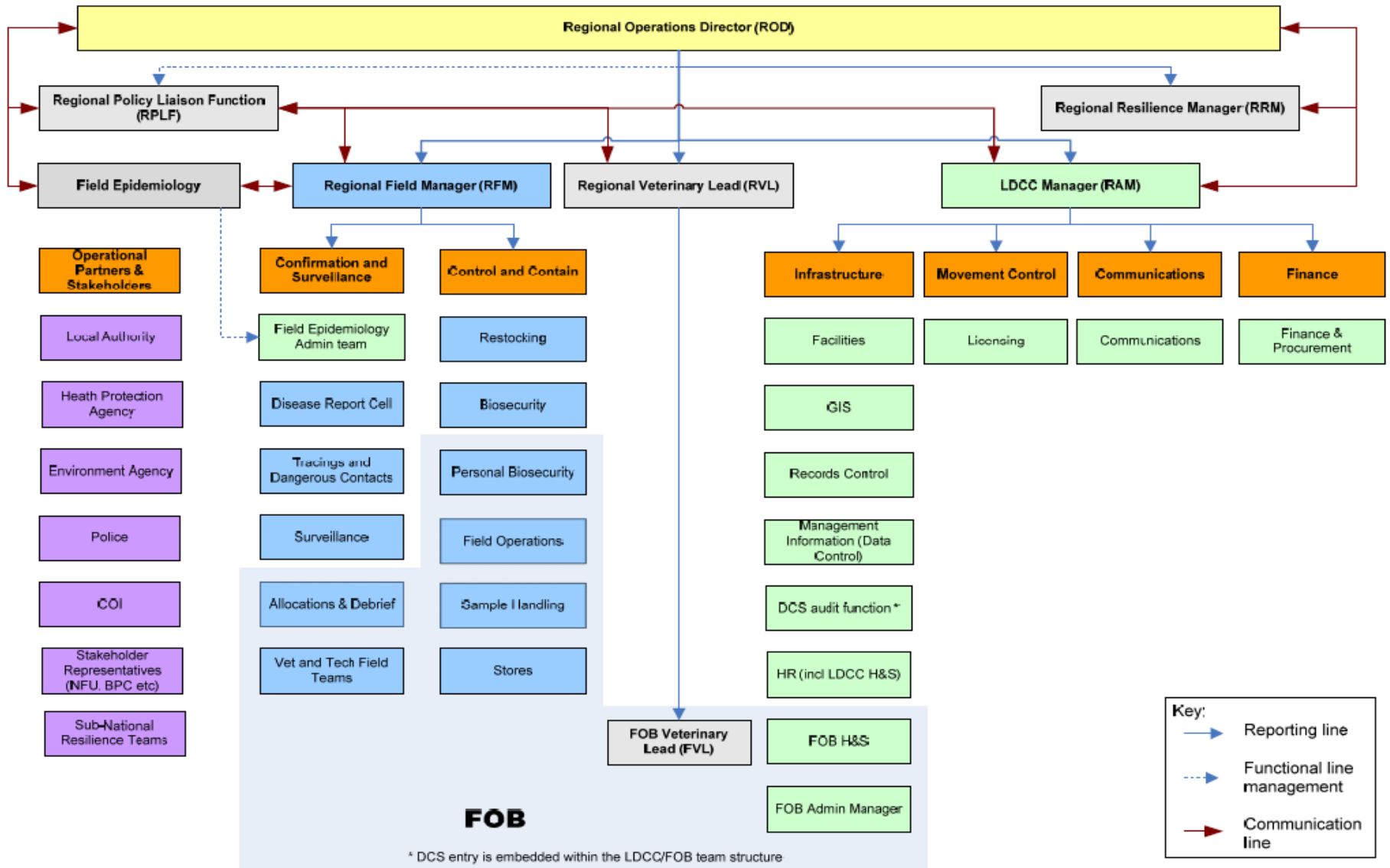
The important thing is that the structure, lines of command and control, roles and responsibilities should be focused on good communication and satisfactory control.

Operation of a Local Disease Control Centre (LDCC)

- *Location*
- *Space including meeting rooms and briefing rooms*
- *Office and administrative facilities*
- *Communications*
- *Facilities for operational staff*
 - **Car Parking**
 - **Car wash**
 - **Clean and Dirty Areas**
 - **Storage including refrigerated storage**
 - **Protective Clothing facilities**
 - **Sample handling**



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Operation of a National Disease Control Centre (NDCC)

Similar Facilities to LDCC but does not require facilities for field operational staff

Access for national stakeholders

Access for Senior Managers of Operational Partners



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Key:
—— Reporting line
- - - - Liaison line

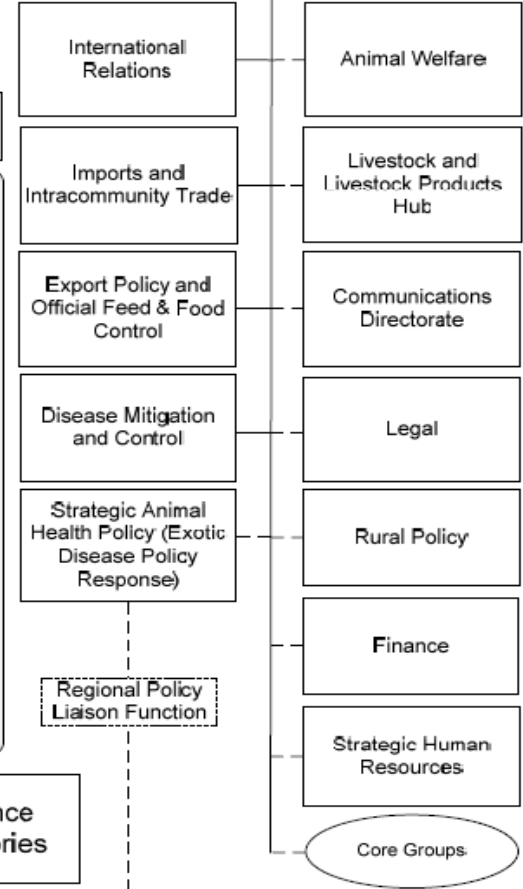
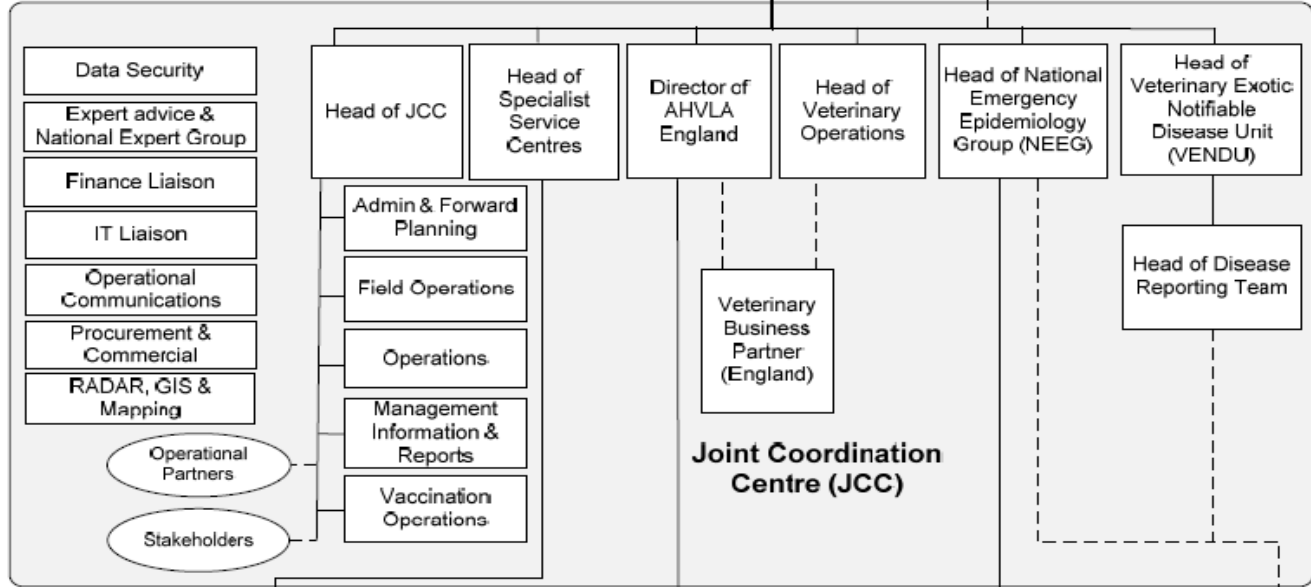
CVO(UK)

Operations

Policy

Chief Executive AHVLA

Director of Corporate Services Chief Scientist Finance Director Outbreak Operations Director Outbreak Veterinary Director Director of Change (inc. HR)



Specialist Service Centres

AHRO/AHO
(involved in outbreak but no LDCC established)

LDCC/FOB
RVL RFM RRM
LDCC Mgr

Field Epidemiology Team

Reference Laboratories

Control Centre Battle Rhythm

Time	Level	Event
0800 – 0830	Strategic	Daily Stock take
	Operational	Daily Management & Communications Meeting
0830 – 0900	Tactical	NDCC Birdtable
	Operational	LDCC Birdtable
0900 – 0930	Tactical	Daily Communications Meeting
1000 – 1100	Strategic	NSC (THRC)
1130 – 1200	Strategic	Defra Media Briefing
	Operational	Media Briefing
1200 – 1230	Tactical	NDCC Birdtable
	Operational	LDCC Birdtable
1400 – 1430	Tactical / Operational	LDCC Management Teleconference
1500 – 1600	Strategic	NSC (THRC)
1800 – 1830	Tactical	NDCC Birdtable
	Operational	LDCC Birdtable
Ad-hoc	Strategic	Animal Disease Policy Group
	Tactical	National Experts Group

Cooperation with Other Governments and Non-government Organizations

Trans-boundary disease

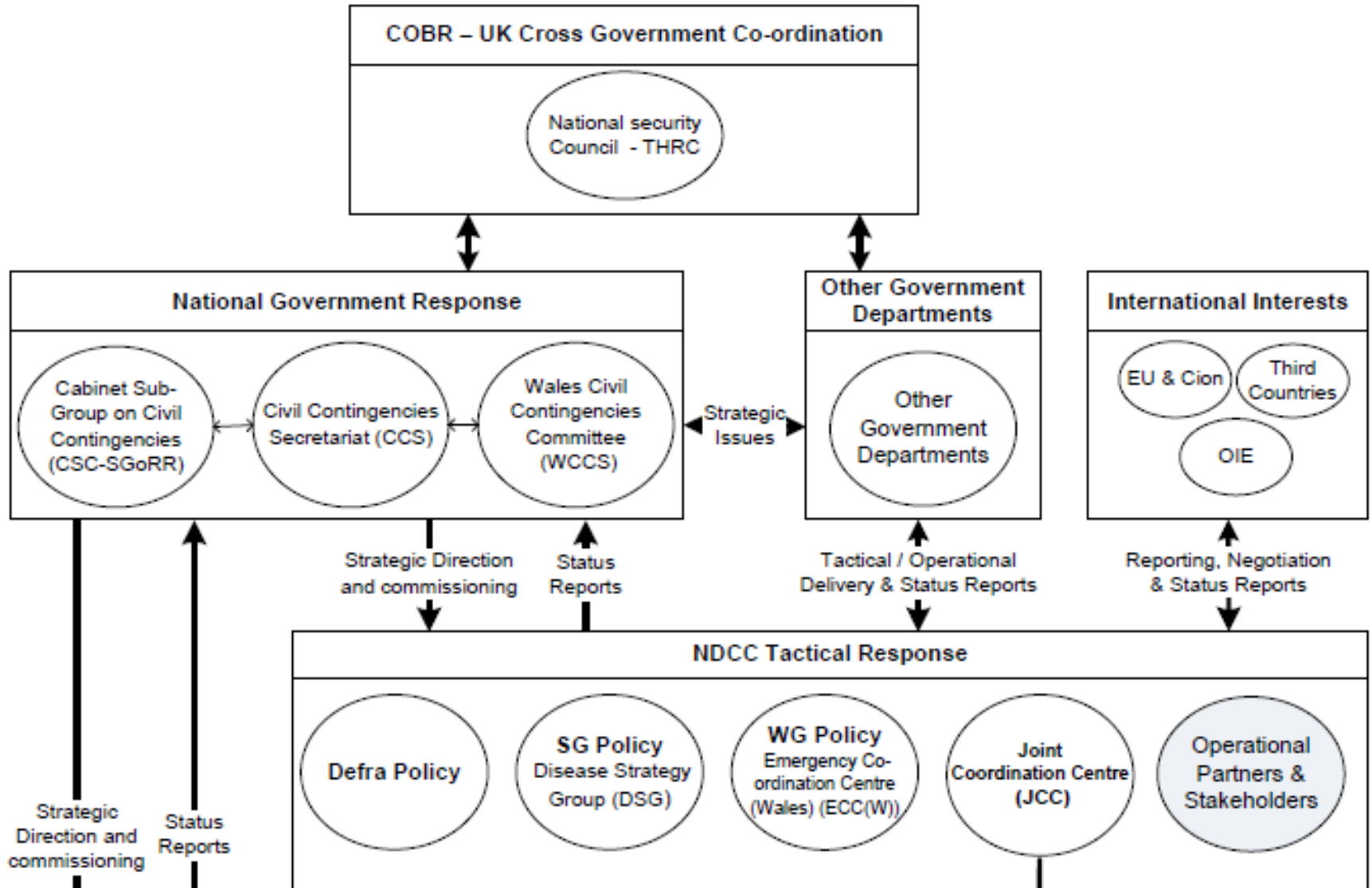
- **Needs co-operation, co-ordination and communication between Governments**
- **Buffer Zones**

Large epizootics impact across economy as whole

- **Needs involvement and co-ordination across Government Departments and Non-Government organisations**



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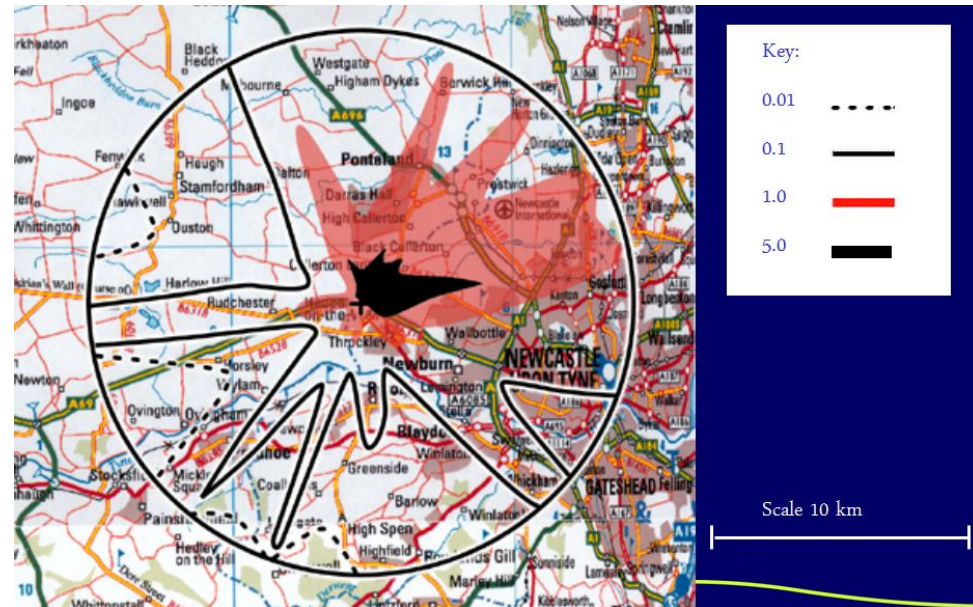
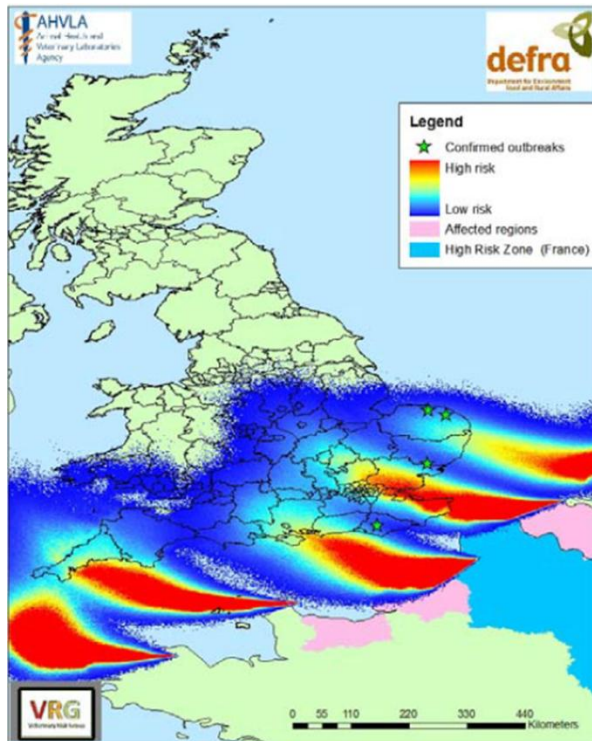
Management of Animal Movements and Trade Restrictions

- **Principle:** *Science and Risk based controls, Stakeholder involvement*
- **Legal:** *Directive, Decision(see later slide) National legislation*
- **Area:** *Holding, Protection Zone, Surveillance Zone, Wider Zones, National*
- **Licences:** *Specific, General, Open*
- **Conditions:** *Inspection, treatment of products, transport, segregation, C&D, Health Marking*
- **Administration:** *NDCC, LDCC, Local Authority*
- **Enforcement:** *Local Authority Critical Point*
- **Time:** *Measures and conditions change with stage of epizootic and effectiveness of control measures*
- **Object:** *Safe Trade; Confidence in resumption of trade*

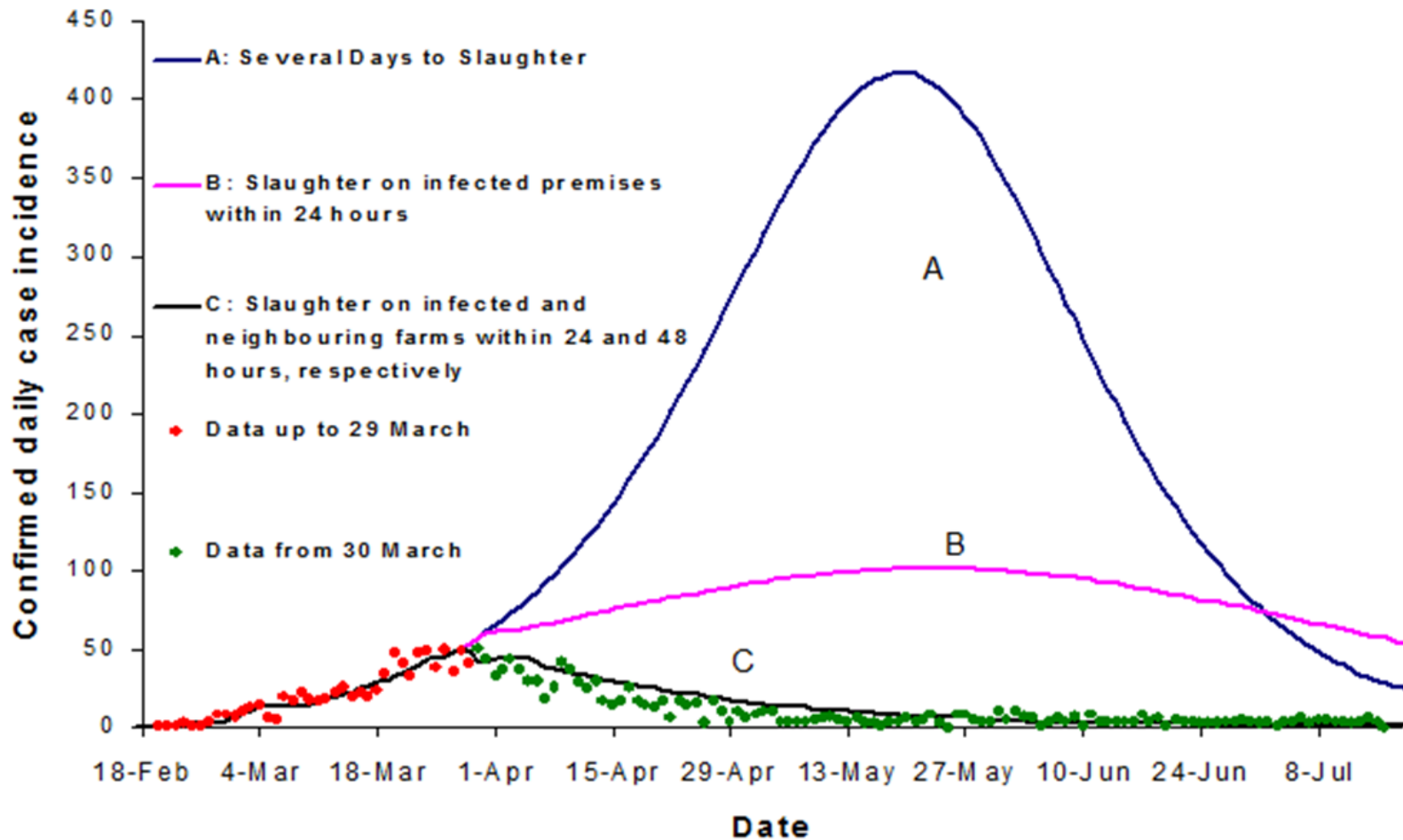


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The Use of Epidemiological Models Meteorological



Imperial College Contiguous Cull Model 29 March 2001 Unnecessary Pre-emptive Killing



Modelling

Interspread 2

A Powerful Tool which can give insights into an epidemic; can be used as a decision support tool e.g. whether to vaccinate (may need to link with economic models).

Characteristics and limitations of each model have to be understood – GIGO!

But politicians find them beguiling

"A model is a lie that helps you see the truth"

Attr Howard Skipper

Role and Involvement of SCFCAH

Animal Health and Animal Welfare ^{1/8}

Regulation (EC) No 178/2002

The Committee is made up of representatives of the Member States and is chaired by a representative of the Commission.

The Committee is a regulatory committee. The Commission may adopt the implementing measures by a qualified majority of the Member States.

Safeguard measures 90/425 (Vet Checks) and 89/662(

The Committee may also examine any issue at the written request of one of its members.



SCFCAH

- *Decision 2007/552/EC prohibited dispatch of Animal and Animal Products from Great Britain (not Northern Ireland) on the outbreak of FMD in 2007 in the UK*
- *In disease situation affected MS make regular reports to SCoFCAH on situation and answer questions.*
 - **Builds confidence that situation is under control**
 - **Share information - Exchange of views**
 - **Confidence on resumption of Trade**

