

The FMD CBA and cost sharing

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Background

- Why the CBA project?
- What was delivered?
- What is in place?
 - DST
 - Call-off contract
- Current work – AI modelling

Decision Support Tool - coverage

- Pigs, sheep, cattle
- GB
- 2 models
 - epidemiology
 - economicsplus an integration module
- Only model to analyse resources, either as constraint or as output

DST - capabilities

Epidemiological variables include

- standstill regime, virus characteristics, resources, tracing effectiveness, patterns of vaccination, vaccine efficacy, index case

Economics model

- 4 types of costs input
 - Disease control costs
 - Compensation costs
 - Uncompensated industry costs
 - Other consequences (tourism, environment, wider economy etc.)

Structure of the CBA

Disease control costs

- Labour
- Materials
- Services
- Transport and disposal



Compensation costs

- Disease control cull compensation



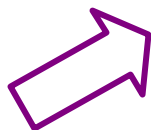
Uncompensated industry costs

- Withholding costs & loss of quality
- Auction market/abattoir losses
- Export ban
- Welfare culls



Other consequences

- Tourism
- Loss of amenity
- Environmental impact
- Wider economic effects



Total cost to
livestock
industry &
meat / milk
food chain

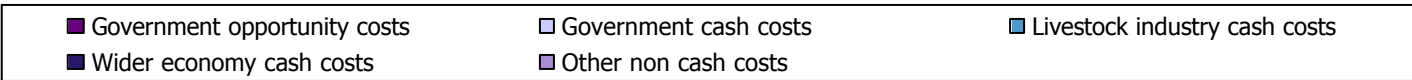
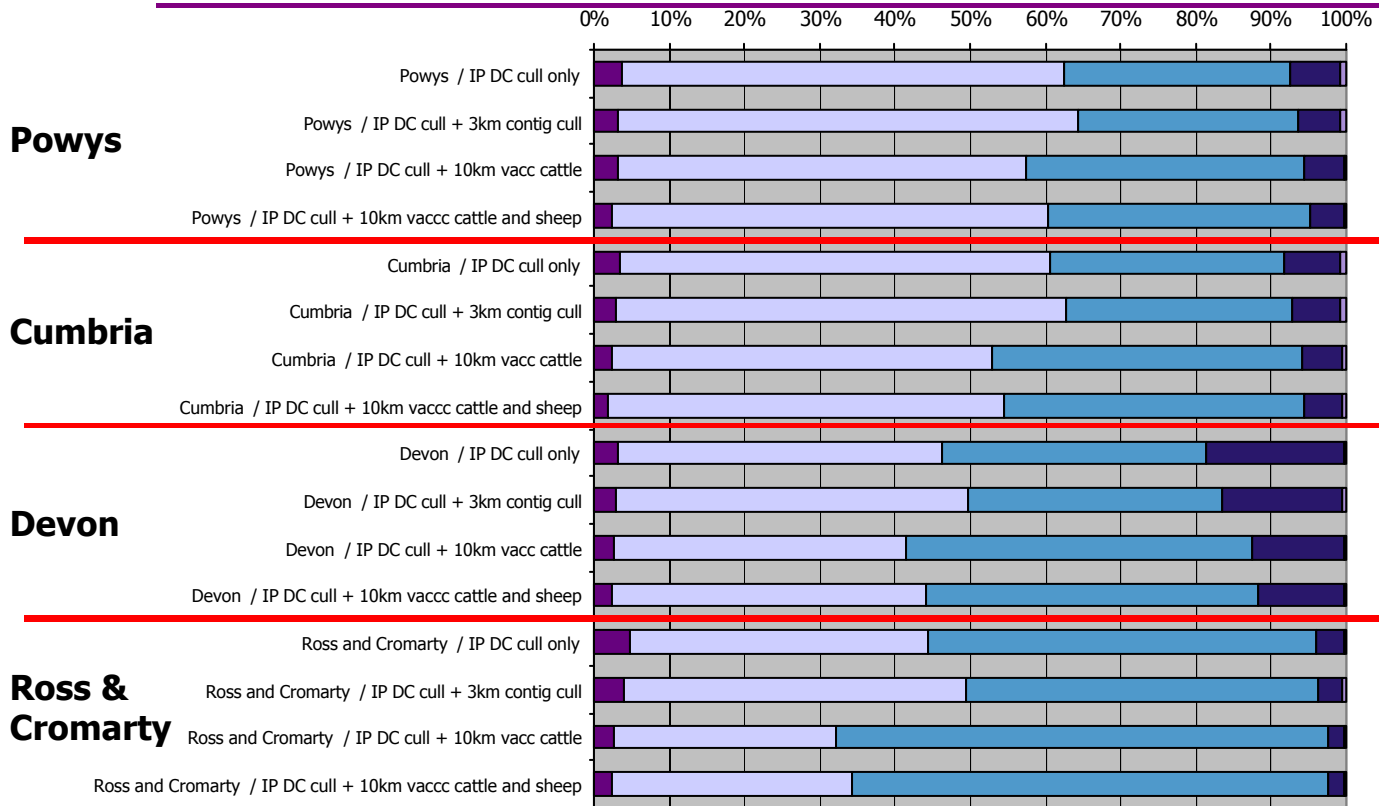
Total cost to
Central
Government

Total cost to
wider
economy

Total cost to UK economy (net of transfer costs)



"Case 1" mean outbreak percentage cost burden



CBA report: some conclusions

- Future outbreaks will be smaller than 2001
- If vaccinate, fewer IPs and animals culled
- Costs most sensitive to speed of detection, tracing of DCs, speed of cull, incursion location
- Vaccination only cost effective for larger outbreaks
- Vaccination increases costs to the industry, but this effect reduces with increased size of outbreak

Health warnings and possibilities

- It is only a model!
 - Needs to be refreshed regularly
 - Figures for vaccination are based on vaccinating in all infected areas
 - Intra-farm transmission
- But, many different analyses of costs possible in many different scenarios either now or with little model modification(see ch. 6 of the RS report)

Further reading

- The RS report can be found at:

www.defra.gov.uk/footandmouth/pdf/costben.pdf