

## **RESEARCH BRIEF: Challenges to bovine viral diarrhoea eradication in the UK and Ireland Author: Orla Shortall, Adam Calo**

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1. KEY MESSAGE The government-industry partnership design of the bovine viral diarrhoea (BVD) eradication scheme has advantages in terms of democratic and effective policy design but disadvantages in terms of lack of clarity over what organisation is or should be ultimately responsible for ensuring different stakeholders comply with the scheme. Key stakeholders (policymakers, academics, veterinarians and industry representatives) saw government as having the ultimate responsibility for enforcing compliance, but the government may not use the same powers, responsibility or desire for involvement in the BVD scheme as they have for exotic and zoonotic diseases. Thus, joint government-industry schemes may rely more on getting buy in from all stakeholder to act in accordance with the recommendations of the scheme, rather than enforcement of laws which may be costly and politically problematic for government to enforce (in the case of BVD this would be a law to cull persistently infected animals). The maintenance of scheme legitimacy through an effective public-science-policy interface is crucial for the goals of the bovine viral diarrhoea (BVD) eradication scheme. Five BVD eradication schemes across the four nations within the UK, and Ireland were designed and administered separately. This allows for greater flexibility in designing a scheme suitable for each country, but lack of integration of the schemes across borders particularly in their later stages, may increase the risk of disease persistence.

## **2. MAJOR FINDINGS**

1. Use of scarce resources to enforce compliance in an industry-led eradication scheme could be difficult to justify within government if the disease is not exotic or of public health interest.

2. The main risk to eradication schemes seen by key stakeholders in all 5 countries was having farms that retain persistently infected animals. Official advice from the schemes and from veterinarians is that farmers should cull persistently infected animals. However, none of the 5 schemes legally compel farmer to slaughter persistently infected animals and imposed movement restrictions instead.

3. Because BVD is not a notifiable exotic disease, many key stakeholders did not see it as feasible or desirable to compel farmers to cull persistently infected animals. But it was also seen that farmers might not follow the advice to cull persistently infected animals for different social and economic reasons (see Shortall and Brown, 2019).

4. Five BVD eradication schemes in the UK and Ireland were designed and administered separately with communication between stakeholders in the different schemes. Key stakeholders stated that integration of the schemes may only be optimal when disease eradication has been achieved across the five different countries. Amendments to the EU animal health law would set criteria for BVD freedom and restrict trade on this basis. Adherence to EU criteria overcomes difficulties of negotiating integration of the 5 UK and Irish schemes individually but also involves political choices which will advantage or disadvantage different producers or countries.

5. Key stakeholders stated that if farmers and other stakeholder saw the aims of the scheme and the knowledge claims it was based on as legitimate then they would comply. Compliance with the scheme was seen by key stakeholders to lead to a reduction in epidemiological risk. A reduction in epidemiological risk builds legitimacy for the eradication scheme. Challenges to any of those links were seen to threaten the success of the scheme. (Figure below)

**3. OBJECTIVES** The aim of the study was to explore challenges to BVD eradication across the UK and Ireland. This involved exploring the benefits and limitations of different scheme design and administration across the UK and Ireland.

**4. POLICY IMPLICATIONS** Because joint industry-government eradication schemes rely on consensual policy making and buy in from all stakeholders as well as legal enforcement, policy means of achieving compliance could be reconsidered. It is problematic to assume that farmers will adhere to epidemiological advice even when there was no incentive and law enforcement. Novel science communication initiatives that encourage peer-to-peer communication rather than expert-to-farmer may help. Alternatively, policy makers may wish to match the design of disease management policy

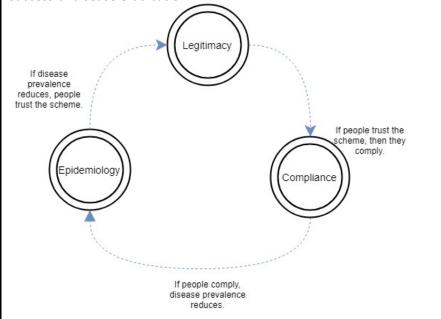


more closely to farmers' constraints, values and practice. The Irish government appear to have taken one of the most active stances in eradication providing farmers with a financial incentive for removal of persistently infected animals. The role of industry in enforcing compliance has been explored in Northern Ireland because there is no sitting government – slaughterhouses no longer accept persistently infected animals. Since this type of industry-government partnership governance of disease eradication is a new departure in the UK and Ireland there is a need to keep negotiating roles and responsibilities as schemes evolve.

**5. IMPORTANT ASSUMPTIONS AND LIMITATIONS** Twenty five key stakeholders were interviewed: 5 from Ireland, 5 from Northern Ireland, 4 from Wales, 5 from England and 6 from Scotland. Interviewees included government employees, private vets, academics and representatives of agricultural organisations involved in the organisation and implementation of the eradication schemes. Qualitative interviews are an opportunity to explore individual people's perspectives in detail to engage with the reasons and mechanisms underpinning the organisation of the social world.

## 6. FIGURE OR TABLE

Key stakeholders' views on the interaction between scheme legitimacy, compliance and epidemiology necessary for successful disease eradication.



**7. LINKS TO EXISTING PUBLICATIONS OR REPORTS** Shortall, O. and Calo, A. (2019) Exploring challenges to bovine viral diarrhoea eradication in the UK and Ireland. James Hutton Institute, Aberdeen. Shortall, O. and Brown, K. (2019) Exploring the challenges to Bovine Viral Diarrhoea (BVD) eradication in Scotland James Hutton Institute, Aberdeen.

## 8. POLICY COMMENTS/RESPONSE

This policy brief provides a valuable overview of the BVD eradication schemes in the British Isles. It is particularly helpful to see the similarities in approach and in difficulties encountered by each scheme. The brief also provides reassurance to policy makers in the design of the scheme to date, and useful pointers for future stakeholder/operational partner engagement. The "virtuous circle" of legitimacy/compliance/epidemiology is a useful model in explaining the BVD eradication scheme and will to apply to other disease eradication programmes that SG might consider in the future.