society for general Microbiology

DEPARTMENT FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS (DEFRA) CONSULTATION ON PLANS TO IMPLEMENT COUNCIL DIRECTIVE 92/119/EEC ON THE CONTROL OF SWINE VESICULAR DISEASE

EVIDENCE SUBMITTED BY THE SOCIETY FOR GENERAL MICROBIOLOGY (SGM)

Introduction

The Society for General Microbiology, founded in 1945, is an independent professional scientific body dedicated to promoting the 'art and science' of microbiology. It has now established itself as one of the two major societies in the world in its field, with some 5,000 members in the UK and abroad.

General Comments

The draft regulations seem very sensible. It is clear that the European Economic Community (EEC) requires the UK to alter regulations to comply with the EEC directive and the way this is proposed would seem to simplify the current situation and make it more appropriate for the disease in question, Swine Vesicular Disease (SVD). The measures are more targeted – focussing on the porcine sector and reducing the effects upon the non-porcine animal sector.

- Due to difficulties with diagnosis (symptoms similar to Foot-and-Mouth Disease Virus [FMDV]), in the first instance one must assume a suspected FMDV outbreak.
- Once SVD had been confirmed (and FMDV eliminated) as the cause of the disease, restrictions applying to FMDV should be lifted.
- The regulations seem to be entirely concerned with detection *via* virus isolation / serological diagnosis. There is no mention of detection of SVDV nucleic acid sequences in samples *via*, for example, the reverse transcription polymerase chain reaction (RT-PCR) – see: Part 2, 10 (3) (a) and (b). It surely must be the case that detection of these sequences by RT-PCR is the most sensitive method of detecting the presence of virus (genomes), and will complement, if not soon replace, the less-sensitive serological methods of detection.
- It is recommended that ***all mammalian livestock species*** – not just pigs – be only allowed to move through a protection zone ***without stopping***. This is at variance with Schedule 2, section 1 of the Statutory Instruments which refers only to pigs.
- Containment / disinfection procedures pertaining to SVDV should be applied, but movement restrictions etc. should apply to ***all animals*** on a farm with an outbreak of SVDV – not just pigs alone. This would prevent passive transfer of SVDV by non-susceptible species (mammals & birds). This is at variance with Schedule 2, section 3 (1) which refers only to pigs.

Specific Questions

Do you think the Secretary of State should have powers to impose a Temporary Control Zone in cases where SVD is suspected on a premises, containing measures to help prevent the possible spread of disease?
Yes.

Do you think the Secretary of State should have powers to impose a Restriction Zone where possible disease spread across the country needs to be better understood containing measures to help prevent the possible further spread of disease?
Yes.

Are there any powers or measures not in the proposed new legislation which you think should be added in order better to control disease or reduce the risk of spread of disease?
Yes. The document is unclear as to what would happen to non-porcine animals on an infected property? Non-porcine animals must be viewed as potential (passive) vectors of disease.

Do you agree that we should include a provision for the Secretary of State to exempt exceptional categories of pigs if it can be done without jeopardising the control of the disease (Regulation 9)?
Yes.

Sources

This evidence has been prepared on behalf of SGM by Professor David Rowlands, University of Leeds, and Professor Martin Ryan, University of St. Andrews.

About the SGM

Society membership is largely from universities, research institutions, health and veterinary services, government bodies and industry. The Society has a strong international following, with 25% of membership coming from outside the UK from some 60 countries.

The Society is a 'broad church'; its members are active in a wide range of aspects of microbiology, including medical and veterinary fields, environmental, agricultural and plant microbiology, food, water and industrial microbiology. Many members have specialized expertise in fields allied to microbiology, including biochemistry, molecular biology and genetics. The Society's membership includes distinguished, internationally-recognised experts in almost all fields of microbiology.

Among its activities the Society publishes four high quality, widely-read research journals (*Microbiology*, *Journal of Medical Microbiology*, *Journal of General Virology* and *International Journal of Systematic and Evolutionary Microbiology*). It also publishes a highly respected quarterly magazine, *Microbiology Today*, of considerable general educational value. Each year the Society holds two major scientific meetings attended by up to 1500 microbiologists and covering a wide range of aspects of microbiology and virology research.

The governing Council of the SGM has a strong commitment to improving awareness of the critically important role of microbiology in many aspects of human health, wealth and welfare. It has in this connection recently initiated a 'Microbiology Awareness Campaign' aimed at providing information to the government, decision makers, education authorities, media and the public of the major contribution of microbiology to society.

An issue of major concern to the Society is the national shortage of experienced microbiologists, particularly in the field of clinical microbiology and in industry. To attempt to improve this situation long-term, the Society runs an active educational programme focused on encouraging the teaching of microbiology in university and college courses and in the school curriculum, including primary schools. Some 570 schools are corporate members of SGM.

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