Comment

Pulling together on bluetongue

BLUETONGUE virus serotype 8 (BTV-8) seriously tested Britain’s evolving arrangements for dealing with a highly disruptive notifiable disease outbreak in 2007/08 but, in the event, these were generally deemed to have been successful. With Defra warning of an increased risk of a bluetongue incursion later this summer, the question remains as to whether this will again be the case in 2016. More is now known about the virus than when it first appeared in northern Europe in 2006 and, with vaccines now available, regularly updated risk assessments and a concerted campaign underway both to raise awareness of the disease and encourage farmers to consider vaccinating their stock in consultation with their veterinary surgeon, the country could be said to be in a better position to prevent an outbreak than it was in 2007. However, disease by its nature is unpredictable and, as was the case in 2007, it is difficult to be sure at this stage about what might happen and how high the uptake of vaccination will be.

BTV-8 arrived unexpectedly in northern Europe in 2006, resulting in more than 2000 cases in that year alone. Its arrival in the UK was less of a surprise, as its spread to the UK via infected midges blown on the wind from the Continent had been predicted by epidemiological and meteorological modelling. 1 Nor did the disease take off in the UK to the extent it did elsewhere across Europe, which was largely attributed to the success of vaccination programmes using vaccines that had been developed in the meantime. 2 Nevertheless the outbreak was costly and disruptive, and the threat of an outbreak later this summer needs to be taken seriously.

Defra first warned of the increased risk in February, urging farmers to be vigilant for bluetongue following a risk assessment carried out by the APHA in the light of the re-emergence of BTV-8 in central France. The risk assessment suggested that the risk of an incursion in a cool spring (with average temperatures below 12°C and 15°C) could be between 5 and 10 per cent, rising to between 35 and 60 per cent later in the summer, and to between 60 and 80 per cent by the end of the summer. The risks arose because of the possibility of infected midges being blown across on the wind from France. Discussing the role of vaccination and residual herd immunity in helping to reduce the spread of BTV-8, it suggested that it was likely that immunity was greatly reduced since the last outbreak, and that a substantially naïve population was now present in Europe (VR, February 20, 2016, vol 178, pp 178-179).

At the time of that risk assessment, there were concerns that supplies of vaccines might not be available to help prevent or control the spread of an outbreak. However, in June, manufacturers indicated that they would be making vaccines available in the UK later in the summer and, in July, the Government announced that supplies are now available (VR, June 11, 2016, vol 178, p 595; July 23, 2016, vol 179, p 85). Defra continues to monitor the bluetongue situation in France and its updated assessments are available at www.gov.uk/government/publications/bluetongue-virus-btv-8-in-france. Recent reports suggest the UK’s risk level remains the same, at medium, for this time of year, while also noting that, if daily average temperatures increase in mainland France and disease starts to circulate towards the north or north east of the country, the risk level will start to increase. Its latest report, dated July 21, also discusses the results of a serological survey of bulk milk samples from 200 dairy herds in the south east and east of England for antibodies to BTV, which was started at the beginning of June. This found that a high proportion of the herds tested positive for BTV antibodies in the bulk milk tests but, the report makes clear, this should not be taken as a sign for protective immunity: each positive result could have been caused by just one or a few animals in the herd having an antibody due to past infection or vaccination and contributing to the bulk milk sample (see pp 134-135 of this issue).

It is interesting to compare the response to the threat of the outbreak in 2016 with the response in 2007 when the idea of shared responsibilities and working in partnership was still relatively new in the UK and, unlike today, the cost of ensuring vaccine supplies was partly underwritten by the Government. A Joint campaign Against Bluetongue (JAB) involving Defra and farming and veterinary organisations was instituted in 2008 to raise awareness of bluetongue and help get the vaccine out into the field. JAB has been reinstated in 2016 and, over the past two months, has held a series of information events around the country. In addition it has put together relevant information about the disease on the NFU’s website to an extent that would not have been possible in 2008, and this is available at www.nfuroadvice.com/news/latest-news/bluetongue-what-you-need-to-know/. More information is available on Defra’s website at www.gov.uk/bluetongue, and on the Pirbright Institute’s website at www.pirbright.ac.uk/viruses/bluetongue-virus. The differential diagnosis of bluetongue was discussed in an article in In Practice in 2008,3 while a useful overview of the 2006-2008 epizootic in Europe was published in In Practice in 2009.4

Commenting on the bluetongue situation in an update in Veterinary Record in April, the UK’s Chief Veterinary Officer, Nigel Gibbens, highlighted the role of vets in helping to raise awareness of the disease and noted that vaccinating animals before the onset of warm weather would provide protection before the risk of infection increased. He also drew attention to the GB Bluetongue Virus Control Strategy (available at www.gov.uk/government/publications/bluetongue-virus-bgb-disease-control-strategy), which sets out the measures that would be considered and deployed if the virus appears in Britain. The biggest impact of these controls would be the application of restriction zones of at least 150 km from which susceptible animals would not be allowed to be moved to other parts of the country (VR, April 23, 2016, vol 178, p 410). This would have significant implications for trade and animal welfare. In this instance, as always, it is far better to take all available steps to try to prevent disease than to have to deal with an outbreak once it occurs.

2. BURGIN, L., GLOSTER, J. & MELLOR, P. S. (2009) Why were there no outbreaks of bluetongue in the UK during 2008? Veterinary Record 164, 384-387

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