



APHA Briefing Note 18/19

BLUETONGUE VIRUS SEROTYPE 8 – MALFORMED CALVES AND ABORTION

Purpose

1. This briefing note is to remind Official Veterinarians (OVs) of the risk of bluetongue virus (BTV) and that BTV serotype 8 (BTV-8) is re-emerging in northern Europe. BTV-8 should be considered as a possible cause of malformed calves or abortion, in addition to Schmallenberg virus (SBV).

Background

2. Since mid-December 2018, there have been reports from France of calves being born small and blind and dying at a few days of age. The number reported has increased considerably since January 2019.
3. These animals have been positive by PCR on blood and spleen for BTV-8, and negative for SBV. This detection in calves of about a week of age during the culicoides vector-free period suggests transplacental BTV-8 infection.
4. The 2006/9 BTV-8 strain also showed some transplacental transmission, but these were more associated with abortions and dummy calves. However, transplacental transmission in the current re-emerging strain in France appears to be at a much higher prevalence.
5. Since the first reports of cases, 418 samples from such calves have been reported as testing positive by PCR for BTV-8. Between 2 and 15 per cent of newborn calves have been infected on some farms.
6. This observation, and further studies using experimental midge infection, suggest that the current BTV-8 strain in France has a reduced culicoides vector competence, which reflects phenotypic changes in the re-emerging strain with far less obvious clinical signs appearing in susceptible animals.
7. Transplacental transmission is of interest as a possible mechanism of over-wintering of the virus in the absence of midges in northern Europe.

8. OV's and livestock owners should note that the re-emerging BTV-8 strain in northern Europe may cause transplacental transmission and infection of foetuses in cattle.
9. **BTV-8 should therefore be considered as a possible cause of malformed calves or abortion, in addition to SBV. The weaker pathogenicity of the re-emerging strain of BTV-8 in adult sheep and cattle may result in fewer clinical signs (compared to the UK 2007 strain), so an increase in awareness is required to avoid the suspicion of infection being missed.**

Further Information

- More information on how to identify and report BTV can be found here:
<https://www.gov.uk/guidance/bluetongue>
- For more information on the latest situation in Europe visit:
<https://www.gov.uk/government/publications/bluetongue-virus-in-europe>
- BTV is a notifiable disease. If it is suspected contact us immediately:

England: Call the Defra Rural Services Helpline on 03000 200 301

Wales: Call 0300 303 8268

Scotland: Contact your [local field services office](#).

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