

Voluntary Vaccination against Bluetongue in the Channel Islands

In August 2015 an outbreak of bluetongue virus serotype 8 (BTV-8) was been reported in central France (500km from the Channel Islands). Sheep are most severely affected than cattle and goats but cattle are the main reservoir of the virus.

In **sheep** typical clinical signs are:

- facial swelling
- eye and nasal discharges
- drooling as a result of ulcerations in the mouth
- lethargy (sluggish and drowsy)
- respiratory problems
- high rectal temperature
- Lameness with inflammation at the junction of the skin and the coronary band
- Death (up to 70%)

In **cattle** typical clinical signs are:

- swelling of the head and neck
- eye and nasal discharges
- drooling as a result of ulcerations and swelling in the mouth
- lethargy (sluggish and drowsy)
- swollen teats

In **goats** typical clinical signs are mild and likely to be similar to cattle

Photographs of Livestock with Bluetongue disease

Sheep



Fig 1: Early clinical case of BTV showing depressed appearance.



Fig 2: There is a swelling of the face and ears and the sheep often appears stiff and reluctant to move.



Fig 3: Facial oedema and nasal discharge and excoriation of BTV infected sheep.



Fig 4: Typical foot lesion found in BTV infected sheep involving coronitis and inflammation of the whole claw region but no formation of blisters.

Cattle



Fig 5: There is oedema (swelling) of the face



Fig 6: There is lacrimation but no obvious eye lesions.



Fig 7: There is a serous to mucopurulent nasal discharge



Fig 8: Affected cattle are febrile (up to 40.0°C) and appear stiff due to swelling of the coronary band at the top of the hooves



Fig 9: Extensive teat erosions may develop in some cattle.



Fig 10: Diffuse reddening of the dental pad with multifocal haemorrhages on the upper lip and dental pad

Both Jersey (June 2012) and The Bailiwick of Guernsey (May 2015) are officially BTV free and Bluetongue is a notifiable disease in the Channel Islands.

BTV is carried by biting midges that could arrive in the Channel Islands by being blown on the wind from France. BTV transmission from midges to livestock is temperature dependent and is unlikely to occur when the average daily temperature is below 15°C. In Guernsey disease transmission is extremely unlikely to take place between the months of December and March when average air temperatures are below 12°C, and unlikely to take place between the months of November and June when temperatures are below 15°C.

In collaboration with Jersey, The Bailiwick of Guernsey has undertaken a veterinary risk assessment in September 2015 and following advice from Defra we concluded that the threat of an incursion of bluetongue into The Bailiwick from France is low to medium. However it is unlikely that transmission of disease from midges to livestock would occur before March 2016.

Based on the current situation our advice would be that vaccination against BTV-8 is recommended, we believe that vaccine will be available in the UK by mid-July. Vaccination with inactivated vaccine is widely acknowledged as the best method to prevent economic loss and welfare problems in the current situation. The benefits of vaccination are:

- Protecting stock from the impact of bluetongue and any accompanying export restriction.
- Reducing losses and welfare problems.
- Reducing chronic effects (including lameness, milk production and weight loss).
- Reducing risk of abortion and foetal abnormalities.

Recommended Action

- You are advised now to discuss control with your private veterinary practitioner (PVP).
- Your vet will need to know species and number of animals if you choose to vaccinate.
- You will be required to record the date of administration, batch number of vaccine and identification of the animals vaccinated, as is the case for any medicine.
- If you have a small number of animals, plan for your to use 1 bottle between you and friends or neighbour's livestock this can only be authorised through your PVP as it is an offence to pass on "Prescription Only Medicine" for another owner's animals.

The primary course of the vaccine requires 2 subcutaneous injections 3 to 4 weeks apart. Vaccinations can be given to naïve livestock (cattle, sheep, goats, llamas) from 1 month of age. All animals vaccinated must be identified and where appropriate a record of vaccination must be recorded in pedigrees. Where animals are not individually identified they will need to be permanently marked to indicate that they have been vaccinated; this may take the form of an ear-tag. A list of all vaccinated animals must be available to officers of Agriculture Livestock and Countryside Management Services upon request.

If you suspect disease then you must contact the States Veterinary Officer.

David Chamberlain

States Veterinary Officer

14/06/2015