

Introduction

The purpose of this information leaflet is to increase industry awareness about bluetongue, which is a viral infection of most domestic and wild ruminants such as cattle, sheep, goats, deer etc. Bluetongue virus does not infect humans and, consequently, the disease has no public health significance. There is no risk of the disease being contracted or spread through meat or milk.

Though bluetongue has never been recorded in Ireland, cases occur regularly in many other European countries. Therefore there is a constant threat of the disease being introduced to Ireland.

Possible Routes of Introduction

There are three principal routes by which bluetongue might be introduced to Ireland:

- ▶ Firstly by importing an animal that is carrying the virus in its blood. If this animal was bitten by the right kind of midge and the environmental conditions were favourable, the midge could transmit infection to other animals.
- ▶ The second route of introduction is less likely but could occur if infected midges were blown to Ireland from another country where the disease is present. Again the environmental conditions would have to favour survival of the midges and allow transmission.
- ▶ The least likely route of introduction is through the importation of infected semen or other biological products.

Transmission

The virus is mainly transmitted by vectors (biting midges of the *Culicoides* species), although transplacental transmission (i.e. from the dam to the calf in utero) has also been recorded in cattle in the case of serotype 8. Those midges that spread infection are most active between April and November in Ireland and are commonly found around farms. Of the 16 most common midge species in Ireland, at least 8 are potential vectors for bluetongue. As the presence of the disease depends on the presence of the vectors, the disease is seasonal - mainly appearing between July and November.

Control Measures

EU and national legislation to deal with the control of bluetongue include:

- Establishment of Control (20km), Protection (100km) and Surveillance (150km) Zones around the infected holding
- Movement restrictions within and from these zones
- Confinement of animals indoors at times when the vector is active
- Control / eradication of the vector by destruction of habitats and use of insecticides
- Slaughter of infected / suspected animals, only if necessary to prevent spread of the disease, with destruction of carcasses
- Vector monitoring (light traps)
- Vaccination

The movement of cattle or sheep would be controlled within and from the control zones, including the 150km surveillance zone, and exports of live animals would be subject to restrictions. Controls would be kept in place until there is no further risk of spread, but may be relaxed during the period when the insect vectors are not active (the vector free period).

Trade Implications

The trade implications if bluetongue is confirmed in Ireland will depend on the bluetongue situation in the country or area of destination:

- ▶ If the country or area of destination is bluetongue free or is not affected by the same bluetongue serotype as is then circulating in Ireland, movement of live animals and semen, ova and embryos will be subject to the strict conditions laid down in EU Law.
- ▶ If the country or area of destination is restricted due to the same bluetongue serotype as is then circulating in Ireland, movement of live animals and semen, ova and embryos would be the same as movement within the same restricted zone and be subject to minimal conditions.
- ▶ There are also implications for live animals exported through bluetongue restricted areas, as animals and transport vehicles transiting such areas have to be treated with insecticides/insect repellents.
- ▶ As bluetongue cannot be transmitted in meat or milk, trade in such products should not be affected.

Imports from Europe

Anybody intending to import cattle or sheep from Europe should be familiar with the requirements on importation from bluetongue restricted areas and should assess carefully the risks associated with such imports in present circumstances. All animals coming from or passing through a European bluetongue affected country will be tested for bluetongue on arrival and should be kept indoors and isolated from other animals until tests results are available



Clinical Signs

In many herds or flocks, only one or two animals may be affected and clinical signs may be very subtle and not easily observed. The following list summarises those clinical signs that one might expect to see in an animal with acute infection:

Cattle:

- ▶ Nasal discharge
- ▶ Swelling and ulceration of the mouth
- ▶ Swollen teats
- ▶ Tiredness
- ▶ Conjunctivitis
- ▶ Reddening of the skin

Sheep:

- ▶ Fever
- ▶ Swelling of the head and neck
- ▶ Lameness
- ▶ Mouth and nose ulcerations
- ▶ Drooling
- ▶ Haemorrhages in the skin and other tissues
- ▶ Respiratory problems
- ▶ High mortality rate
- ▶ Discolouration and swelling of the tongue



What should you do if you suspect disease?

Bluetongue is a notifiable disease. Any suspicions of the disease must be reported immediately to your private veterinary practitioner or the local Regional Veterinary Office. Farmers and other owners of ruminant animals should, therefore, familiarise themselves with the clinical signs of the disease (listed above) and be on the alert for abnormal behaviour or illness in cattle, sheep, goats and deer especially during warm weather. In the event of suspicion, ruminant animals must not be moved from the premises until blood sample results have ruled out the disease.

For further information, including further photographs of some of the clinical signs of the disease, please see the bluetongue page in the Animal Health and Welfare section of the Department's website at www.agriculture.gov.ie.

In the event of an outbreak, details will be provided on the Department's website.



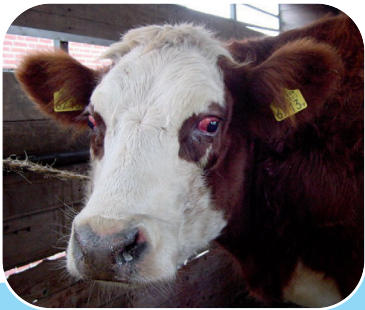
Bluetongue infected sheep with profuse nasal discharge and swollen face.



Bluetongue infected sheep with profuse nasal discharge and swollen face.



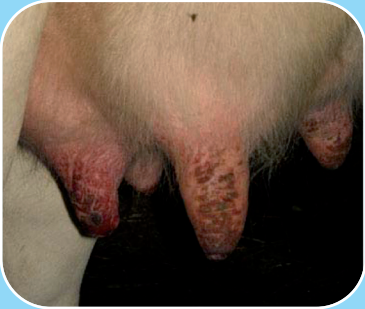
Bluetongue infected sheep with coronitis.



Bluetongue infected cow with conjunctivitis and nasal discharge.



Bluetongue infected cow with erosion of the nasal mucosa.



Bluetongue infected cow with a swollen udder and crusting of the teats.



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