

What should farmers do to safeguard their herd?

Farmers and other owners of ruminant animals should familiarise themselves with the signs of the disease and be on the alert for abnormal behaviour or illness in cattle, sheep, goats and deer especially during warm weather (see clinical signs leaflet on website). Bluetongue is a notifiable disease. Any suspicions of the disease should be reported immediately to the local District Veterinary Office.



BTV infected sheep with coronitis.



BTV infected cow with conjunctivitis and nasal discharge.



BTV infected sheep with profuse nasal discharge and swollen face.



BTV infected cow with erosion of the nasal mucosa.



BTV infected sheep with profuse nasal discharge and swollen face.



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

List of DVO Addresses

CARLOW	DVO, Athy Road, Carlow.
CAVAN	DVO, Farnham Street, Cavan.
CLARE	DVO, Kilrush Road, Ennis, Co. Clare.
CORK N	DVO, Hibernian House, 80 South Mall, Cork.
CORK C	DVO, Hibernian House, 80 South Mall, Cork.
CORK W	DVO, Darrara, Clonakilty, Co. Cork.
DONEGAL	DVO, Meeting House Street, Raphoe, Co. Donegal.
DUBLIN	DVO, St Johns House, High Street, Tallaght, Dublin 24.
GALWAY	DVO, Dockgate Building, Merchants Rd, Galway.
KERRY	DVO, Spa Road, Tralee, Co. Kerry.
KILDARE	DVO, Poplar Square, Naas, Co. Kildare.
KILKENNY	DVO, Hebron Road, Kilkenny.
LAOIS	DVO, Abbeyleix Road, Portlaoise, Co Laois.
LEITRIM	DVO, Main Street, Drumshambo
LIMERICK	DVO, Houston Hall, Ballycummin Ave, Raheen Ind Est., Limerick.
LONGFORD	DVO, Ballinalee Road, Longford.
LOUTH	DVO, North Quay, Drogheda, Co. Louth.
MAYO	DVO, Michael Davitt House, Castlebar, Co. Mayo.
MEATH	DVO, Kilcairn, Athlumney, Navan.
MONAGHAN	DVO, Main Street, Ballybay, Co. Monaghan.
OFFALY	DVO, Clonminch, Tullamore, Co. Offaly.
ROSCOMMON	DVO, Circular Road, Roscommon.
SLIGO	DVO, Cranmore, Co. Sligo.
TIPPERARY N	DVO, St. Conlans Road, Nenagh, Co. Tipperary.
TIPPERARY S	DVO, Davis Street, Tipperary.
WATERFORD	DVO, The Glen, Waterford.
WESTMEATH	DVO, Bellview, Mullingar, Co. Westmeath.
WEXFORD	DVO, Vinegar Hill Lane, Templeshannon, Enniscorthy, Co. Wexford.
WICKLOW	DVO, No 2 the Murrough, Wicklow Town

Tel: 059 9170022
Tel: 049 4368200
Tel: 065 6866042
Tel: 021 4851400
Tel: 021 4851400
Tel: 023 36200
Tel: 074 9145298
Tel: 01 4149900
Tel: 091 507600
Tel: 066 7145052
Tel: 045 873035
Tel: 056 7772400
Tel: 057 8674400
Tel: 071 9682000
Tel: 061 500900
Tel: 043 50020
Tel: 041 9838933
Tel: 094 9035300
Tel: 046 9079030
Tel: 042 9748800
Tel: 0506 46037
Tel: 090 6626202
Tel: 071 9142023
Tel: 067 50014
Tel: 062 80100
Tel: 051 301700
Tel: 044 39300
Tel: 054 42100
Tel: 0404 25000

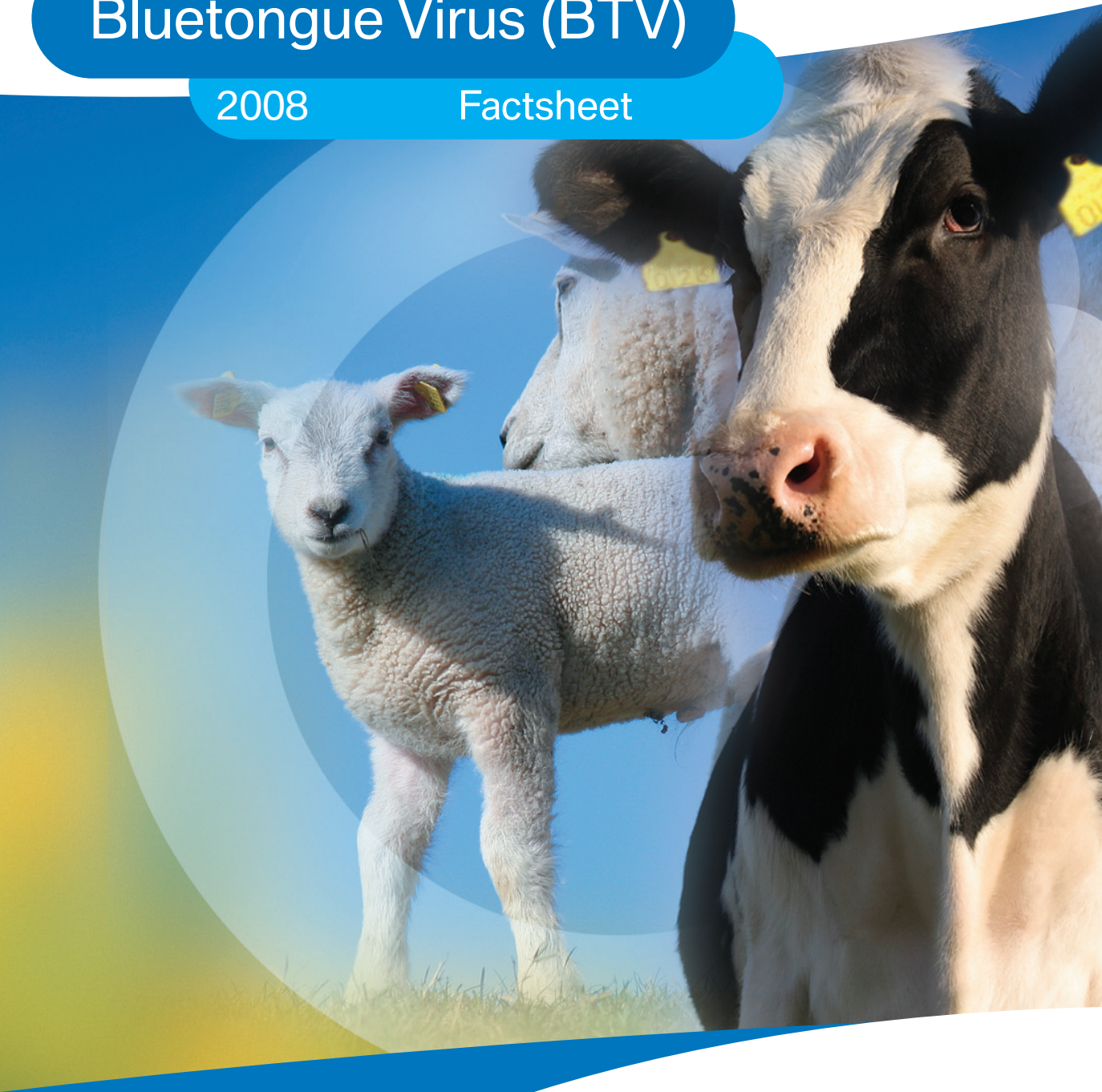
The telephone numbers of the Regional Veterinary Laboratories are as follows:

ATHLONE:	090 6475514
CORK:	021 4543931
KILKENNY	056 7721688
LIMERICK	061 452911
SLIGO	071 9142191
DUBLIN	01 6157117

Bluetongue Virus (BTV)

2008

Factsheet



What is BTV infection?

It is a viral infection of most domestic and wild ruminants such as cattle, sheep, goats, deer etc. There are 24 serotypes of BTV and strain variations within these serotypes. Depending of the strain of virus it may affect some species more than others. Six serotypes of BTV had been found in sheep in the Mediterranean countries of the EU for a number of years. In August 2006, an unprecedented disease epizootic in sheep and cattle started in the Netherlands, Belgium, and Germany and by the end of 2007 had spread to a total of 10 European countries. This epizootic was caused by serotype 8, previously known to have been in sub-Saharan Africa, but a new serotype in Europe. BTV has never been recorded in Ireland but recent events in northern Europe mean that there is the potential for this to happen.

How does it affect livestock?

Cattle are less likely to show signs of the disease than sheep. In northern Europe, many herds and flocks had only one or two animals affected. In affected cattle herds, the average morbidity was 5% and mortality was less than 1%. In sheep flocks, the average morbidity was 30%, and mortality was 8%. Disease was more severe in the second season than the first.

The following list summarises those clinical signs that one might expect to see in an animal with acute infection:

- Cattle:
- ▶ Sores and crusts on the face
 - ▶ Sores in the mouth
 - ▶ Red eyes and excess tears
 - ▶ Drooling
 - ▶ Sores and crusts on the teats
 - ▶ Drop in milk yield
 - ▶ Dry, hard patches on the skin
 - ▶ Lameness
 - ▶ Weight loss



- Sheep:
- ▶ Sores and crusts on the face
 - ▶ Swollen face
 - ▶ Sores in the mouth
 - ▶ Lameness
 - ▶ Weight loss
 - ▶ Frothing at the mouth
 - ▶ Off feed
 - ▶ Sores and crusts on the teats
 - ▶ Drop in milk yield
 - ▶ Dullness

How do animals become infected?

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. It is not shed into the environment, so cleaning and disinfection procedures will not control its spread. The 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 BTV. They feed on livestock mainly in the hours around dusk and dawn but, if conditions suit, they can be active almost 24 hours a day under Irish weather conditions. Infection is transmitted when an uninfected midge takes a blood meal from an infected sheep or cow. If the temperature is high enough (high 20's centigrade for several days) the virus will develop inside the midge and be transmitted when the midge feeds on a new host. With the arrival of cooler autumn or winter weather, midge activity and virus transmission will cease. The virus may survive over the winter, but the mechanism for this is not fully understood, and disease may reappear the following season, after midge activity has recommenced.

How long does it take animals to become sick if bitten by a BTV-infected midge?

Between 4 and 20 days, depending on the type of animal, its age, the strain of the virus and the dose of the virus received.

Are people at risk from BTV?

BTV 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.

How could BTV get to Ireland?

By three routes:

- ▶ 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 such as France or the UK. 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.



How is BTV controlled?

The EU and national legislation to deal with the control of Bluetongue broadly follows the arrangements in place for other diseases such as Foot and Mouth Disease and Avian Influenza etc., but are more extensive given the way in which the disease can be spread. The measures for 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).



Should BTV get into Ireland how would it affect trade?

The trade implications **if BTV 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.

What is DAFF doing?

DAFF have initiated two levels of surveillance.

The first involves a blood test on cattle and sheep, and includes:

- ▶ Surveillance of randomly selected herds throughout the whole country.
- ▶ Post-import testing of all imported ruminants from EU Member States.

The second level of surveillance concerns trapping midges throughout the country to find out what kinds and numbers of midges occur here and what time of year they are active. Vector surveillance is being carried out at 34 randomly selected trapping sites, in partnership with the Department of Zoology, NUI Galway. Sampling will be carried out for a minimum of three consecutive years.

Apart from the surveillance programme and the import control measures currently in place, the Department regularly updates its contingency arrangements (including arrangements for possible vaccination) and legislative basis for dealing with a potential outbreak and continues to monitor any developments very carefully, particularly over the summer months. The Department also carries out risk assessments on the risk of introduction into and spread of BTV in Ireland. While the Minister for Agriculture, Fisheries and Food is satisfied that the surveillance programme and other measures now being put in place are, at this stage, a proportionate response to the heightened risk and current threat, the Minister will not hesitate putting in place such additional measures as may be determined appropriate from time-to-time.

Can animals be imported from affected countries?

The importation of live ruminants from Bluetongue restricted areas in Europe is permitted under certain conditions that ensure that the animals are protected from BTV infection by:

- ▶ vaccination or
- ▶ natural immunity or
- ▶ protection from vector attack.

The conditions for importation have been revised on several occasions in light of new information. The revised conditions are posted on the bluetongue page in the Animal Health & Welfare section of the Department's website – www.agriculture.gov.ie. Anybody intending to import ruminants from Europe should be familiar with the restrictions on importation from bluetongue restricted areas.

Farmers and others should assess carefully the risks associated with importing animals in present circumstances.

