



Ref: VITT1200/BT-SP

# DETECTION OF BLUETONGUE VIRUS IN SPAIN

Prepared by:  
Dr Mirzet Sabirovic  
Simon Hall

Approved by:  
Fred Landeg

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## 1 Summary

Spain reported laboratory confirmation of bluetongue virus (BTV) infection in three out of eight sentinel cattle located in the Province of Cadiz, Southern Spain. At this stage, this detection appears to be confined to a single sentinel cattle herd in Southern Spain. There are no reports of disease outbreaks in sheep.

The risk of disease introduction to the UK before this BTV detection is considered negligible. No imports of susceptible animals and their germplasm occurred during the past six months. The maximum infective period for bluetongue is 100 days as specified by the OIE.

The risk of the disease introduction to the UK following this BT detection is considered negligible. Spain has applied EU controls in the protection and surveillance zone around the affected holding.

EU safeguard measures now apply to Provinces of Cadiz, Seville and Malaga and specified districts of the Provinces of Cordoba, Granada and Huelva. These measures prevent exports of susceptible species and their germplasm from the specified areas.

The UK TRACES Risk Messaging System has now been updated with a requirement that any future consignment of susceptible species originating from non-restricted areas in Spain be subjected to post-import checks.

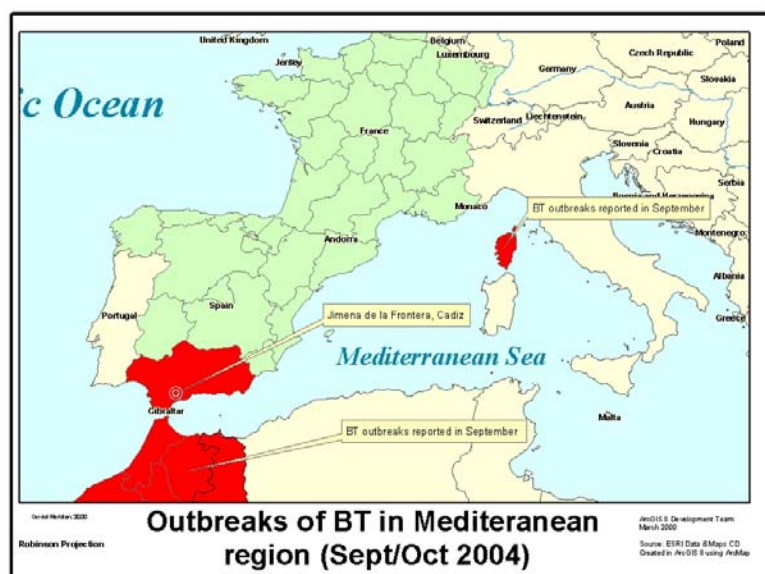
The Veterinary Directorate continues to monitor the situation and will re-assess the risks if new information becomes available.

## 2 BLUETONGUE VIRUS (BTV) IN SPAIN

### 2.1 Report on detection

The Spanish authorities reported the presence of bluetongue virus (BTV) in a sentinel cattle herd located in the Province of Cadiz, Southern Spain (Fig. 1) on 13 October. BTV infection was confirmed by laboratory testing (polymerase chain reaction) on 11 October in three out of eight tested cattle.

Fig.1. Bluetongue in Spain (October 2004)



The initial information indicates that the BT detection is confined to this sentinel herd. There are no reports on the disease in sheep.

**Comment:** It is important to note that cattle are the main amplifying and maintenance host for BTV. It is considered that the population of infected *Culicoides*

vectors builds up in a primary cycle involving cattle or other susceptible wildlife during spring and early summer. Sheep become infected in a secondary cycle as a 'spill over' host during late summer and autumn.

BT introduction to the southern parts of Spain is not unexpected due to the proximity of the recent outbreak in Morocco and the possibility of wind transmission of infected vectors to Spain. Competent vectors are also known to be present in the southern parts of Spain. This sequence of events again emphasises and demonstrates that early surveillance of cattle is important as an early warning of the introduction and circulation of BTV strains.

Detailed information on the disease can be found at Defra's website:  
<http://defraweb/animalh/diseases/notifiable/disease/bluetongue.htm#eu>

### **3 LEGAL TRADE – SITUATION BEFORE THE BTV DETECTION**

#### **3.1 Live animals**

TRACES, (the European Commission electronic system for notification of movements of live animals, their products and germplasm - within the European Union and from third countries) shows no imports of susceptible species from Spain to the UK. This is within the period starting just over six months before 11 October 2004, the date when the virus infection was first suspected. Six months is more than the maximum infective period of 100 days for Bluetongue, as specified by the OIE.

#### **3.2 Meat/meat products**

Meat/meat products are not considered as a potential source of BT virus. Disease transmission is mainly via blood-sucking midges (genus *Culicoides*).

#### **3.3 Germplasm**

TRACES shows no imports of germplasm from susceptible species from Spain to the UK.

### **4 BLUETONGUE RESTRICTIONS IN PLACE**

#### **4.1 Spain - current situation**

Following the confirmation of BT, the Spanish authorities have applied BT control measures (a 100 km protection zone, within a 150 km surveillance zone) as required under national and European legislation. These measures include quarantine of the affected holding, destruction of the flock, control of arthropods and wildlife reservoirs, movement control, surveillance and zoning.

EU safeguard measures now apply to Provinces of Cadiz, Seville and Malaga and specified districts of the Provinces of Cordoba, Granada and Huelva. The measures prevent exports of susceptible species and their germplasm from the specified areas.

#### **4.2 European legislation - summary**

In response to BT outbreaks, affected Member States are required to apply EU rules in the protection and surveillance zones around outbreaks. EU rules

require Member States to control the disease according to a plan approved by the Commission, which may include vaccination outside restricted zones.

With regard to susceptible live animals, an affected Member State must prevent trade from restricted zones (protection and surveillance zone), unless proven that animals come from the areas within that area free from virus circulation or vectors. The Member State must carry out surveillance based on clinical signs, monitoring of sentinel cattle and the vector population. UK national BT legislation is available at the following website: (<http://www.hmsso.gov.uk/cgi-bin2/dialogserver?DB=hmsso-new>)

With regard to semen, EU rules require that the approved collection centre and the donor animals are not subject to any animal health restrictions.

With regard to embryos, EU rules require that an approved embryo collection team carries out collection and that the holding of the donor females is not subject to any animal health restrictions.

## **5 COMPETENT VECTORS**

The major Old World vector of BTV, *C. imicola*, has been shown to be widely distributed across southern Europe. Evidence suggests that its range may be extending northwards, possibly in response to climate-change (Mellor and Wittmann 2002; Conte *et al* 2003).

## **6 ASSESSMENT OF THE RISK TO THE UK**

Based on current information on the presence of BTV in a single sentinel cattle herd in Southern Spain, the Veterinary Directorate presently considers that with regard to:

### **6.1 Legal trade in:**

#### **6.1.1 Live susceptible animals**

Prior to this BT detection the risk was considered to be:

- Negligible as no live susceptible animals were imported from Spain to the UK during the specified risk period.

Currently, the risk is considered to be:

- Negligible as control measures under EU rules prevent exports of animals from the affected areas.

### 6.1.2 Germplasm

Prior to this BT detection, the risk was considered to be:

- Negligible, because no embryos (sheep, or cattle) were imported from Spain during the specified risk period,
- Negligible because no semen (sheep, or cattle) was imported for the past three months from Spain during the specified risk period.

Currently, the risk is considered to be:

- Negligible as control measures under EU rules prevent exports of germplasm obtained from animals in the affected areas.

### 6.1.3 Meat/meat products from susceptible animals

- The risk is negligible because BT is not transmitted by meat/meat products, but blood-sucking midges.

## 6.2 Vectors

It is considered unlikely that *Culicoides imicola*, the main vector of BT will become established in the UK. However, recent studies provided evidence that other vector species of *Culicoides* also occur in Europe (i.e. midges of the *C. obsoletus* and *C. pulicaris* groups). Multiple isolations of BTV have been made from these species in the field (Savini *et al* 2003). The midges of these groups are known to be present in the UK.

## 7 CONCLUSION

The initial information indicates that the BT virus presence is confined to a single sentinel cattle herd in Southern Spain. There are no reports of disease outbreaks in sheep.

The risk of disease introduction before this outbreak is considered negligible as no trade in susceptible animals and their germplasm occurred during the specified risk period which is more than the maximum infective period of 100 days for BT, as specified by the OIE.

Currently, the risk of the disease introduction from this outbreak is considered negligible. Spain has applied EU controls in the protection and surveillance zone around the affected holding. EU rules prevent exports of susceptible species and their germplasm from areas subject to the disease control measures.

The UK TRACES Risk Messaging System has now been updated with a requirement that any future consignment of susceptible species originating from non-restricted areas in Spain be subjected to post-import checks.

The concern remains that other *Culicoides* species which occur much further north and in the UK are considered to be competent BT vectors with varying degree.

The Veterinary Directorate continues to monitor the situation and will re-assess the risks if new information becomes available.

Fred Landeg  
Deputy Chief Veterinary Officer (15 October 2004)

## 8 REFERENCES

- Conte, A., Ippoliti, C., Calistri, P., Pelini, S., Savini, L., salini, R., Goffredo, M., Meiswinkel, R. (2003). Towards the identification of potential infectious sites for bluetongue in Italy: A spatial analysis approach based on distribution of *C. imiciola*. In: Abstract Book, Third OIE Bluetongue International Symposium, Taormina, Italy, 26-29<sup>th</sup> October 2003, p.47.
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