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# FURTHER CASES OF BLUETONGUE

## IN

## SPAIN

### AN UPDATE (22 OCTOBER 2004)

Prepared by:  
Dr Mirzet Sabirovic  
Simon Hall

Approved by:  
Nigel Gibbens

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## Table of Contents

<b>1</b>	<b>SUMMARY.....</b>	<b>3</b>
<b>2</b>	<b>BLUETONGUE VIRUS (BTV) IN SPAIN.....</b>	<b>4</b>
2.1	DISEASE REPORT .....	4
<b>3</b>	<b>LEGAL TRADE – SITUATION BEFORE THE BTV DETECTION .....</b>	<b>5</b>
3.1	LIVE ANIMALS .....	5
3.2	MEAT/MEAT PRODUCTS.....	6
3.3	GERMPLASM.....	6
3.4	BLOOD/BLOOD PRODUCTS FOR PHARMACEUTICAL MANUFACTURING.....	6
	<b>BLUETONGUE RESTRICTIONS IN PLACE .....</b>	<b>6</b>
3.5	SPAIN - CURRENT SITUATION.....	6
3.6	OTHER COUNTRIES AS IDENTIFIED BY EPIDEMIOLOGICAL INVESTIGATION.....	7
3.7	EUROPEAN LEGISLATION - SUMMARY .....	7
<b>4</b>	<b>VECTORS.....</b>	<b>7</b>
<b>5</b>	<b>ASSESSMENT OF THE RISK TO THE UK .....</b>	<b>8</b>
5.1	LEGAL TRADE IN LIVE SUSCEPTIBLE ANIMALS .....	8
5.2	GERMPLASM.....	8
5.3	MEAT/MEAT PRODUCTS FROM SUSCEPTIBLE ANIMALS .....	9
5.4	BLOOD/BLOOD PRODUCTS FOR PHARMACEUTICAL MANUFACTURING.....	9
5.5	VECTORS .....	9
<b>6</b>	<b>CONCLUSION.....</b>	<b>9</b>
<b>7</b>	<b>REFERENCES.....</b>	<b>10</b>

# 1 Summary

Following the report of detection of bluetongue virus (BTV) in sentinel cattle on 13 October (<http://www.defra.gov.uk/animalh/diseases/monitoring/pdf/bt-spain.pdf>), the Spanish authorities notified of further clinical suspicion of BTV infection in three sheep flocks located in the province of Caceras (southern Spain). Spain also notified Portugal, France and Italy that several at risk consignments of susceptible species have been sent to them from the affected areas.

The risk of disease introduction from Spain to the UK before this outbreak is considered negligible as no trade in susceptible animals and their germplasm occurred during the specified risk period.

Currently, the risk of the disease introduction from Spain to the UK 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.

As a precautionary measure, we have assessed the risk from countries identified by traceforward investigation by Spain. The risk to the UK from Portugal, France and Italy is considered negligible on the basis of current information. It is expected that Portugal, France and Italy will provide information on any follow up action taken in response to information provided by the Spanish authorities.

The UK TRACES Risk Messaging System has now been updated with a requirement that any future consignment of susceptible species and their germplasm originating from non-restricted areas in Spain be subjected to post-import checks. The same requirements now apply to imports of possible consignments of susceptible species and their germplasm from Portugal, France and Italy (areas under no restriction for BT).

The concern remains that *Culicoides* species that occur outside the range of *Culicoides imicola*, including the UK, are considered to be competent BT vectors to varying degree.

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

## 2 BLUETONGUE VIRUS (BTV) IN SPAIN

### 2.1 Disease report

Following on from report on detection of bluetongue virus (BTV) in sentinel cattle on 13 October in cadiz, Andalusia, the Spanish authorities notified of clinical suspicion of BTV infection in three sheep flocks located in the province of Caceras (southern Spain) (Fig.1). Traceback investigation identified sheep movements from Cadiz to a local assembly centre before the movement restrictions were put in place.

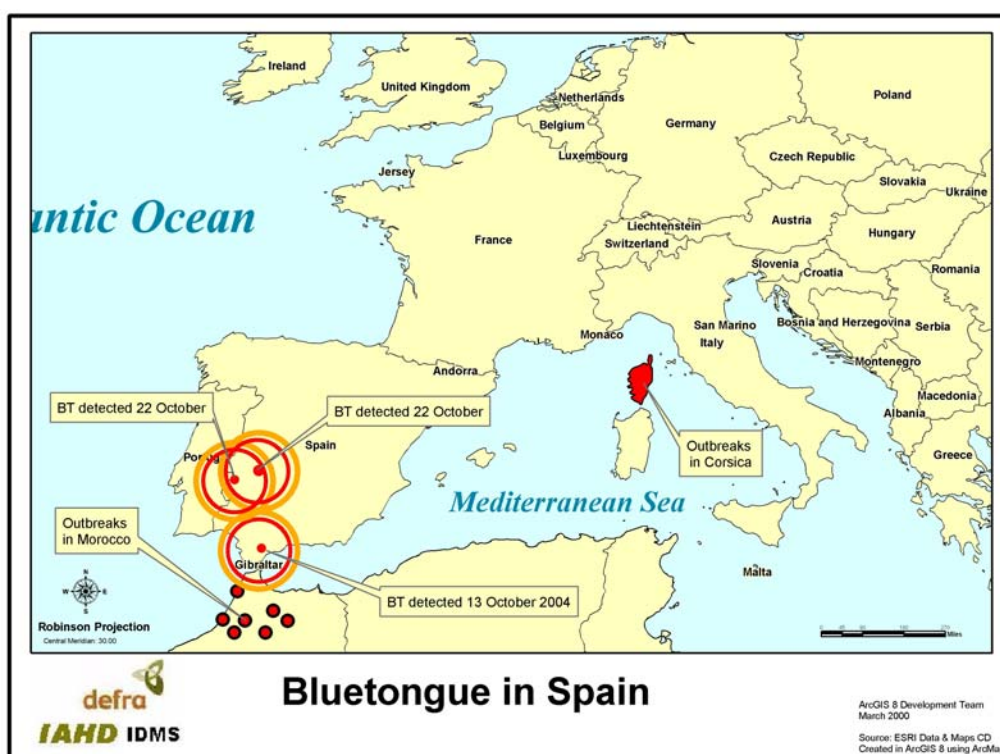


Fig.1. Bluetongue in Spain – situation in October 2004

Another suspected BTV presence was reported from a cattle farm located in the province of Badajoz (Fig.1), close to the border with Portugal. This farm has been under investigation since 15 October. All cattle that tested positive were slaughtered on 20 October. As a precautionary measure, a total ban on movements of animals has been put in place in the two affected provinces (Caceras and Badajoz). The location of both outbreaks is shown in Fig. 1.

Traceforward investigation revealed shipments of sheep for slaughter to Italy, France and Portugal, and 11 consignments of sheep for breeding to Portugal.

Following the index case on 13 October, the Spanish authorities intensified serosurveillance in Andalusia (5,360 serology tests from 670 farms), including increased vector monitoring (more traps in risk areas) and reinforced vector control (disinsection)

**Comment:** Presence of bluetongue virus (BTV) in a sentinel cattle herd (695 animals) located in the Province of Cadiz, Southern Spain was detected on 13 October. The infection was confirmed by laboratory testing (polymerase chain reaction) on 11 October in three out of eight tested cattle.

BT introduction to the southern parts of Spain is not unexpected due to the proximity of the recent outbreak in Morocco in September 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.

BT is an arthropod-borne disease of ruminants. The disease does not affect humans. 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**

The epidemiological investigation report received from the Spanish authorities indicate:

- Movement of viraemic animals within Spain;
- Movement of animals to other Member States (Portugal, France, Italy); and
- The extent of protection (100km) and surveillance (150km) zones established under EU rules around affected areas which does include part of Portugal

This risk assessment is primarily focused on the situation in Spain. However, the scope of the assessment is extended to include consideration of onward movement of animals of susceptible species from Portugal, France and Italy which were imported from Spain.

#### **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 in the Cadiz (southern Spain). Six months is more than the

maximum infective period of 100 days for Bluetongue, as specified by the OIE.

TRACES shows no imports of sheep and goats from Italy and Portugal, and goats from France to the UK.

TRACES shows imports of 40 consignments of cattle primarily for breeding purposes from France. There have been 8 consignments of sheep – 7 for breeding purposes (the last one on 14 September) and one for slaughter (late June).

### **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.

TRACES shows no imports of germplasm from susceptible species from Portugal.

TRACES shows 10 imports of bovine semen 5 imports of sheep and goat semen from France to the UK.

### **3.4 Blood/blood products for pharmaceutical manufacturing**

Intra Community trade in these commodities is not subject to border inspection controls or electronic notification of consignments. Veterinary pharmaceuticals are subject to specific regulation under EU rules which ensures that safe raw materials are used and that final product is safe for use in animals.

## **BLUETONGUE RESTRICTIONS IN PLACE**

### **3.5 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. Control measures as specified in Directive 2000/75EC apply to the newly identified areas to prevent exports of susceptible species from protection and surveillance zones

### 3.6 Other countries as identified by epidemiological investigation

There are no official reports on any outbreaks of BT in **Portugal, France or Italy (outside BT restricted areas)**. It is expected that in due course the authorities of these countries will provide official information on any follow up action taken with regard to the traceforward information provided by Spain.

### 3.7 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 Members 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 according to a plan approved by the Commission.

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.

## 4 VECTORS

Predictive modelling of bluetongue vector distribution suggested that the competent vector (*Culicoides imicola*) may be present *“in high abundance at the majority of areas where BT outbreaks were reported. In addition to southern Spain, these areas include southern Portugal, northern Morocco, northern Algeria, northern Tunisia, Majorca, Menorca, Corsica, Sardinia, Lazio, Tuscany, Calabria (the toe of Italy), the eastern and western wedges of mainland Greece, Lesbos, Rhodes, Cyprus, western Turkey and Syria”* (Tatem *et.al.*, 2003, p.26).

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).

## 5 ASSESSMENT OF THE RISK TO THE UK

Based on current information on the presence of BTV in southern Spain, the Veterinary Directorate presently considers that with regard to:

### 5.1 Legal trade in 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.

**Comment:** Spain provided information on traceforward movements of susceptible animals to Portugal, France and Italy. Therefore, we have also considered potential risk that may be associated with theoretical possibilities of onward movement of susceptible species to the UK of animals originating in Spain.

There have been no imports of susceptible animals from **Portugal** and **Italy** to the UK during the specified risk period. Therefore, the risk before this outbreak is considered negligible. There were imports of susceptible species from **France** to the UK during the risk period. The risk of these consignments is currently considered negligible because there have been no reports of the disease in France. Nevertheless, the UK TRACES Risk Management System (TRMS) has now been updated to require intensified post-import checks on any imports of susceptible species from Portugal, France and Italy (areas not under BT disease control measures).

### 5.2 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.

**Comment:** There have been no imports of germplasm of susceptible species from **Portugal** and **Italy**. The risk from imports of germplasm from susceptible species from **France** is currently considered negligible because there have been no reports of the disease in France. Nevertheless, the UK TRACES Risk Management System (TRMS) has now been updated to require intensified post-import checks on any such imports Portugal, France and Italy (areas not under BT disease control measures).

### 5.3 Meat/meat products from susceptible animals

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

### 5.4 Blood/blood products for pharmaceutical manufacturing

- The risk is considered negligible given the epidemiology of the disease, the controls applied by the industry and the limited extent of the outbreak.

### 5.5 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.

## 6 CONCLUSION

Epidemiological information indicates the spread of BT virus in southern Spain. In addition, traceforward investigation indicated that several consignments of susceptible species have been sent to Portugal, France and Italy.

The risk of disease introduction from Spain 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. The same assessment applies to Portugal and Italy. The risk was also considered negligible with regard to imports of susceptible animals and their germplasm from France.

Currently, the risk of the disease introduction from Spain 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. It is expected that Portugal, France and Italy will provide information on any follow up action taken in response to information provided by the Spanish authorities.

The UK TRACES Risk Messaging System has now been updated with a requirement that any future consignment of susceptible species and their germplasm originating from non-restricted areas in Spain be subjected to post-import checks. The same now applies to imports of possible consignments from Portugal, France and Italy (areas under no restriction for BT).

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

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