Updated Outbreak Assessment #5

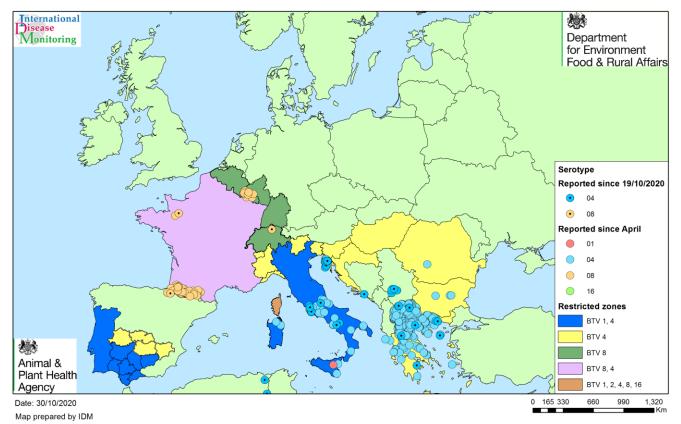
# Bluetongue virus serotype 8 in west Europe

30 October 2020

Ref: VITT/1200 Bluetongue virus in Europe

### **Disease report**

Our previous report on 19 October summarised the ongoing outbreaks of bluetongue virus serotype 8 (**BTV-8**), in southern France and Luxemburg, during September and October. It drew attention to two new outbreaks in cattle in western Germany close to the borders with Luxemburg and north-east France. The situation appears to be changing with BTV-8 outbreaks now reported in north-west France and also spreading south into Spain for the first time since 2008. BTV-8 has also been reported in Switzerland for the first time since March this year.



Bluetongue disease in Europe: May - October 2020

### Situation assessment

In **France**, all previous cases reported were in the south-west of the country (Pyrenees-Atlantique, Ariege, Haute-Pyrenees, and Haute-Garonne), bordering Spain to the south. Since then France has reported a further 11 cases in cattle and sheep in those regions.

However, last week two new cases were reported in cattle in the Mayenne region of northwest France; on the 5 October one animal in a herd of 65 cattle was clinically affected, and on the 12 October one animal clinically affected in a herd of 128 cattle. Both animals showed clinical signs of depression, anorexia, decreased milk production, hyperthermia, congestion of the mucous membranes, ulceration of the muzzle, ocular discharge and conjunctivitis. The closest proximity of these cases to the south coast of the UK are 367 km to Isle of Wight and 384 km to Selsey Bill in Sussex.

In **Switzerland**, a new case of BTV-8 was detected in a cow at a slaughter house near Zurich, on 29 October. The animal did not show any clinical signs, but was detected through the annual surveillance programme, following sampling at the slaughterhouse. The remaining 35 cattle at the holding of origin will be examined for clinical signs. This is the first case reported from Switzerland since March this year.

Since our last report no further incidents of BTV-8 have been reported in Germany.

In **Luxemburg**, a further two cases of **BTV-8** were reported in mid-October. The first was in an affected goat in a herd of 320 reported on the 16 October. The second was in cattle (one animal in a herd of 425) confirmed on the 14 October. It is not clear whether these were clinical cases or following surveillance investigations.

In **Spain**, a single case of BTV-8 in the Elizondo region in the north was confirmed on 21 October, with one animal in a herd of 80 cattle affected. The estimated date of first infection was 6 October, after initial suspicion on the 8 October. The emergence of BTV-8 in northern Spain was not unexpected in view of the cluster of cases just north of the border in southern France (see map). However it is worth noting that as the Pyrenees is such a major biogeographical barrier, it is unlikely that a single infected adult midge would make it over such a high mountain range in one flight. The emergence of BTV-8 in cattle in Spain is more likely to have been spread via a "midge baton" of transmission from one cattle herd to the next cattle herd over the Pyrenees. This would suggest that more positive herds along French/Spain border and in northern Spain are likely to exist. There are also implications for altitudinal movement of infected cattle to and from alpine pastures within the Pyrenees and even possible spread through transport of infected cattle through the road tunnels crossing the Pyrenees.

In the BTV-8 epizootic which started in the Netherlands in August 2006, the infection reached Spain in January 2008 (Sanidad 2020). This current report of BTV-8 in Spain is the first to have occurred since the 2015 re-emergence of BTV-8 in France. There have

however been BTV-1 and BTV-4 restriction zones in place across parts of southern Spain and Portugal up until March 2020 (Sanidad 2020).

Country	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total
Belgium	2	1	2	0	0	0	0	0	0	0	5
France	1	0	0	0	0	0	1	1	17	28	48
Germany	0	0	0	0	0	0	0	0	0	2	2
Luxembourg	0	0	0	0	0	0	0	0	9	2	11
Spain	0	0	0	0	0	0	0	0	0	1	1
Switzerland	1	0	1	0	0	0	0	0	0	1	3
Total	4	1	3	0	0	0	1	1	26	34	7

Table 1 – Outbreaks of BTV-8 in west Europe since January 2020

# Conclusion

The 2020 vector activity season has continued, with suitable temperature and weather conditions over Europe for midge multiplication and virus replication rates. The current risk assessment of BTV-8-infected midges being carried by the wind into southern England from the near-continent is still considered to be LOW. Although BTV-8 has now been confirmed in the north-west of France, it is still at least 367 km from the south coast of the UK. The extent of BTV-8 cases in France is not clear as they have been reporting at sixmonthly intervals. The likelihood of unreported presence of BTV8 disease in northern France during this year has therefore been factored in to the risk assessments for windborne incursion of infected midges.

The whole of France has been declared a restriction zone for BTV-8 and BTV-4. Susceptible livestock cannot therefore be moved to the UK without prior vaccination and post movement testing to detect presence of disease, is in force in the UK.

TRACES has shown there to have been seven movements of sheep from France to the UK during October; however as none of these originated from near the reported BTV8 regions in France, it is concluded that the risk which they pose to UK livestock is still

considered to be low. TRACES has not recorded any recent live sheep or cattle movements into the UK from Spain.

A small risk of BTV incursion always exists from the illegal movement of infected animals or germplasm. Thus, the risk of introduction of BTV-4 or BTV-8 into the UK is considered to be **LOW** (no change).

Livestock owners and field vets in the UK should note that the BTV-8 strain that reemerged in north-west Europe in 2015, can be spread by trans-placental transmission to cause infection in cattle and sheep foetuses. Bluetongue should therefore be considered in the differential diagnosis when investigating poor fertility and offspring born with congenital brain malformations.

Livestock owners are strongly advised to source replacement stock responsibly and consult with their private veterinarians to put in place controls preventing the introduction of Bluetongue virus. Assurances should be sought from traders to ensure BTV-susceptible animals are fully protected prior to travel. This means that additional guarantees should be obtained certifying that the purchased animals have been correctly vaccinated and/or have built up sufficient immunity to protect them against the relevant BTV serotype infections circulating in their region of origin.

We would also like to remind keepers that if they wish to move show animals to an exhibition held in a BTV Restriction Zone on the continent and then return them back to the UK BTV Free Area, the animals will need to be fully vaccinated *against both virus serotypes* (BTV-4 and BTV-8) prior to entering the Restriction Zone.

We will continue to monitor the current situation.

### Authors

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# References

All disease reports are available from the OIE WAHIS database.

Sanidad (2020) Bluetongue virus. <u>https://www.sanidadanimal.info/en/104-emerging-diseases/382-blue-</u> tongue#:~:text=Since%202000%20until%20now%2C%20Spain,the%20wind%20from%20 northern%20Africa.



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