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## Bluetongue Virus Update 9<sup>th</sup> September 2024

National Disease Control Centre Number 7 of 2024



# Bluetongue virus serotype 3 (BTV-3) confirmed on 34 premises across England in sheep and cattle since first confirmed outbreak on 26<sup>th</sup> August 2024

- BTV-3 has been detected on 34 premises across Suffolk, Essex, Norfolk & Yorkshire (as of 09/09/2024).
- The Department for Environment Food & Rural affairs (DEFRA) in Great Britain has implemented restrictions around affected farms. This will restrict the movements of susceptible animals and their products except under licence. A 20km Temporary Control Zones (TCZs) has been established around the affected BTV-3 premises in Yorkshire, with restrictions in the south of the country where most outbreaks have been identified extended to cover the entire counties of Norfolk, Suffolk and Essex (*Figure 1*).



Figure 1 detailing the Temporary Control Zone in Yorkshire and the Restricted area in Norfolk, Sussex and Essex (as of 09/09/2024) map available at <u>APHA Interactive Bluetongue Virus Map (arcgis.com)</u>

- <u>Import of live ruminants from Great Britain to Ireland has remained suspended since the</u> <u>disease was detected in England in November 2023.</u>
- <u>Germinal products (semen, embryos) may be imported from Great Britain into Ireland and the rest of the EU once the relevant animal health requirements for BTV can be certified.</u> <u>However, is it IMPORTANT TO NOTE that importing semen from affected countries is not without risk.</u>
- Movements of ruminants and germinal products from Northern Ireland are still permitted subject to all usual conditions.

#### UK BTV-3 vaccine approval subject to licence

- Authorities in Great Britain have permitted the use of 3 unauthorised bluetongue serotype 3 (BTV-3) vaccines within the UK.
- Vaccine use will be subject to licence. Great Britain intends to introduce vaccination on a phased basis, initially targeting the higher risk counties along the east coast.
- Unlike some of the authorised BTV vaccines for other BTV serotypes, the BTV-3 vaccines can help reduce the levels of infection and the severity of clinical signs but may not prevent animals from becoming infected or ill.
- Unauthorised vaccines cannot be used to certify animals for trade purposes. Further information: <u>Bluetongue serotype 3 (BTV-3) vaccine permits - GOV.UK (www.gov.uk)</u>

## DAFM urges livestock keepers to be vigilant as the spread of disease to new regions of Europe and Great Britain increases infection pressure and risk of bluetongue transmission to Ireland

- Bluetongue is a notifiable exotic disease, caused by bluetongue virus (BTV), that infects ruminant animals (such as sheep, cattle, goats and deer) and camelids (such as llama and alpaca).
- There are different strains of BTV. BTV-3 is the strain currently of most concern, as it is spreading rapidly across North-Western Europe, and now this new case has been found in England.
- Due to the ongoing dynamic situation with BTV-3 and the possibility of rapid disease spread, **importers of livestock** from mainland Europe must be aware of **risks** to their business. If they purchase livestock in a European country, there is a real risk that by the time they attempt to ship the animals to Ireland, that area may be affected by bluetongue and **the animals may not then meet the certification requirements for entry to Ireland**.
- Bluetongue does not affect human health or food safety. However, if bluetongue entered Ireland, it would have a significant impact on animal welfare and trade implications for live animals and germinal products.
- Although Ireland is currently BTV free, the virus could spread to Ireland through import of infected animals, infected foetuses, germinal products or wind dispersal of infected midges from infected areas.
- BTV is spread by infected **biting midges** (*Culicoides species*) which are present in Ireland and are generally most active between **April and November**.
- As temperatures remain warmer throughout the summer and into the autumn months, the risk of bluetongue transmission during this time is higher.
- It is critical that over the coming months, all livestock farmers maintain vigilance for any suspicions of bluetongue, and report any such suspicions to their local <u>Regional Veterinary Office</u> (<u>RVO</u>) without delay.

## Situation in Europe (September 2024)

#### Thousands of bluetongue outbreaks: BTV-3 extends rapidly across Northern Europe

- BTV-3 successfully overwintered in a number of countries having first been detected during September 2023 in The Netherlands and October 2023 in Belgium and Germany.
- Since the beginning of 2024, The Netherlands have now confirmed more than 5318 holdings with BTV-3 positive laboratory results. In addition, more than 1970 holdings have been declared as infected based on characteristic clinical signs. <u>Bluetongue positive by place of residence 2024</u> <u>Map | NVWA</u>
- Since the beginning of August, the disease has spread to France, Luxembourg, Denmark and Switzerland.

- Other strains of the disease are also present in Europe such as serotypes BTV-1, 4 and 8.
- A 'new' more virulent strain of BTV8 emerged in France in August 2023 which was confirmed in Sardinia in Italy in October 2023. Since June 2024, this strain has now been detected in Spain for the first time.

#### Vaccination against bluetongue

• Licenced vaccines are commercially available for Bluetongue serotypes 1, 4 and 8 which can help to facilitate intra-EU movement. Animals from certain countries require vaccination against Bluetongue to meet certification requirements, prior to movement. Proof of vaccination status for the BTV strains recently circulating in those countries/regions should be obtained.

#### **Emergency use of BTV-3 vaccines in affected EU Member States**

- <u>The current new bluetongue serotype 3 vaccines available are currently approved for use only</u> <u>under emergency circumstances. These vaccines have yet obtained European Marketing</u> <u>Authorisation, nor have they determined an immunity period guaranteed in the specifications of</u> <u>the vaccine.</u>
- As a result, animals vaccinated with the BTV-3 vaccines as part of emergency use do not currently meet the certification requirements and cannot be certified by EU member states to allow intra EU movement, including movement to Ireland.
- Vaccination for BTV-3 has been authorised as an emergency measure in some countries including The Netherlands, Germany, Belgium, France, Luxembourg and most recently Great Britain.

## \*Vaccination for BTV-3 has been authorised as an emergency measure in countries where BTV-3 is circulating.

#### BTV-3 vaccines have not yet received EU wide authorisation for use and are not currently widely, commercially available\*

#### **Further Information on bluetongue**

- Sheep are more likely to show obvious and more severe clinical signs of bluetongue than cattle if they become infected, and mortality rates can reach 30- 70%. Some animals may not show any clinical signs however, and these animals can pose a risk for spreading the disease to new areas or countries.
- Bluetongue virus is spread by infected **biting midges** (*Culicoides species*) which are present in Ireland and are generally most active between **April and November**. Activity levels are dependent on average temperatures, so mild weather conditions may see midge activity persisting for longer.
- The incubation period is approximately 2 weeks.
- Once the virus enters the midge population, eradication becomes very difficult requiring very high vaccination uptake levels maintained over a period of several years.

- A wide range of <u>clinical signs</u> are associated with bluetongue, such as:
  - o Fever
  - Inappetence (loss or lack of appetite)
  - o Drop in milk yield
  - Reddening of the mucus membranes
  - Sores on the nose, gum and dental pads
  - Swelling of the face, lips and tongue (i.e. "Bluetongue")
  - Breathing difficulties if the tongue swells
  - Drooling
  - $\circ$   $\;$  Discharge from the eyes and/or nose
  - o Lameness
  - Abortion or deformities in offspring/foetus'
  - In severe cases, death can result

#### Images of the clinical signs of bluetongue virus in sheep and cattle can be found here

• Due to the similarities/deformities that can result from Schmallenberg virus and bluetongue virus in offspring/ aborted foetuses, foetal carcasses submitted for post-mortem to Regional Veterinary Laboratories will be tested for BTV. There are no costs to farmers associated with this additional testing.

## Dangers of using semen imported from bluetongue affected countries

- Appropriately certified germinal products (semen, embryos) from bluetongue affected countries are not without risk of introducing bluetongue into Ireland.
- The import of germinal products is a less risky means of introducing genetic improvements when compared to live animal imports.

## Key messages for livestock importers to prevent bluetongue entering Ireland

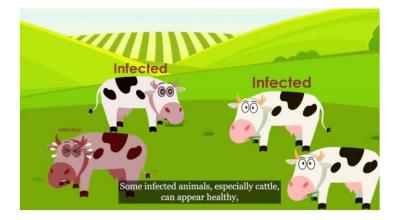
- 1. If you purchase livestock in a European country, there is a real risk that by the time you attempt to ship the animals to Ireland, that area may be affected by a bluetongue outbreak in the region and **the animals may not then meet the certification requirements for entry to Ireland.**
- 2. Instead of purchasing bluetongue-susceptible animals from mainland Europe, consider if there is another way you can achieve the breed/genetic changes you seek (e.g., via artificial insemination) to reduce risk.
- 3. If you must purchase live animals from outside Ireland, only do so during times when midges are less active (Dec Mar).
- 4. Only purchase animals, germinal or biological products from reputable sources. Animals from certain countries require vaccination against Bluetongue prior to movement: proof of vaccination status for the BTV strains recently circulating in those countries/regions should be obtained.
- 5. Ensure the animals are BTV-free before they leave their country of origin by requesting a premovement PCR test for the virus. Although this can give a certain level of assurance, it is important to remember that animals may be harbouring the virus which is not yet detectable by laboratory testing, or they may become infected if bitten by an infected midge *en route*. All susceptible

ruminants need to be tested after their arrival to Ireland even if they have had a negative premovement test.

- 6. Upon their arrival in Ireland, immediately isolate the animals indoors in a clean shed, away from the rest of the herd or flock, until all post-entry blood testing has been carried out and results have been received.
- 7. Ensure that they have access to clean dry bedding, feed and water and contact your vet without delay if any animals appear unwell.
- 8. Contact the local RVO immediately once the animals arrive to arrange for the required post-entry checks for diseases including bluetongue. All animals arriving from mainland Europe are to be visited by an RVO vet within 5 days of arrival into Ireland.

#### **Biosecurity advice for farmers importing livestock can be found here Contact your local RVO for more information before deciding to import.**

Figure 1 Watch a short video on 'How to keep Bluetongue out of Ireland' by clicking here



#### Further information on bluetongue

Please consult the following resources for further information on bluetongue virus:

- Dept of Agriculture Food and the Marine website
- European Commission webpage on Bluetongue
- Bluetongue WOAH World Organisation for Animal Health

## <u>Please be alert and remain vigilant for signs of bluetongue if you are involved</u> with ruminant and camelid species.

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