

Bluetongue Virus Update 22nd October 2024

National Disease Control Centre
Number 9 of 2024



Bluetongue situation and current risks for Ireland

- Bluetongue virus is spread by infected biting midges (*Culicoides* species) which are present in Ireland and are generally most active during warmer months, between April and November.
- As November approaches and temperatures decrease, midge activity in Ireland will now be lower over the winter.
- The risk of bluetongue transmission will however increase in Spring 2025 when temperatures increase, and midges become more active again.

Total number of 143 of bluetongue serotype 3 (BTV-3) cases have been confirmed in sheep and cattle in England, including 2 (high risk moves) in Wales since the first confirmed outbreak on 26th August 2024

- The total number of 143 of bluetongue serotype 3 (BTV-3) cases have been confirmed in England, including 2 (high risk moves) in Wales (as of 18/10/2024).
- The Department for Environment Food & Rural affairs (DEFRA) in Great Britain has implemented restrictions around affected farms. A large restriction zone encompassing several counties in England is currently still in force (Figure 1).



Figure 1 detailing the Bluetongue Control Zone in England (as of 21/10/2024). Map available at <u>APHA</u>
Interactive Bluetongue Virus Map (arcgis.com)

- Import of live ruminants from Great Britain to Ireland has remained suspended since the disease was detected in England in November 2023.
- 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.
- It is IMPORTANT TO NOTE that importing semen from affected countries is not without risk.
- Movements of ruminants and germinal products from Northern Ireland are still permitted subject to all usual conditions.

Movements of live animals and germinal products into Ireland:

The import of live ruminants from Great Britain (GB) to Ireland (IE) remains suspended.

Germinal products (semen, ova, embryos) may be imported from GB into Ireland once the relevant animal health requirements for bluetongue virus can be certified.

The introduction of livestock from other EU member states is permitted only where detailed certification requirements to safeguard against bluetongue can be satisfied. The bluetongue disease situation in Europe is dynamic and there is a real risk of bluetongue virus entry into Ireland.

If you are considering purchasing livestock from Europe, there is a risk that animals may not meet certification requirements for entry to Ireland due to disease outbreaks. Importing semen or embryos from affected countries is not without risk.

<u>NOTE:</u> **The Department will not pay compensation** for animals infected by imported germinal products, nor for imported animals which subsequently test positive for bluetongue in the postentry sampling.

Detection of bluetongue serotype-12 (BTV-12) in The Netherlands (October 2024)

- A new variant of the bluetongue virus (bluetongue serotype-12 (BTV-12)) has been identified in a sheep in *Kockengen, Netherlands*.
- BTV-12 was identified as part of research by Wageningen Bioveterinary Research (WBVR) in the Netherland and confirmed by The European Bluetongue Reference Laboratory in Madrid.
- Additional research in 8 ruminants in the immediate vicinity is underway.
- Due to the detection of BTV-12 in this animal, all bluetongue-positive samples submitted for testing since September 1st, will be analysed again to check for the presence of BTV-12.
- Genetically, the two bluetongue variants, BTV-3 and BTV-12, are unrelated.
- The origin of the new variant is currently unknown.
- There is no vaccine currently available for BTV-12.
- More information: New bluetongue virus serotype, BTV-12, identified in the Netherlands WUR

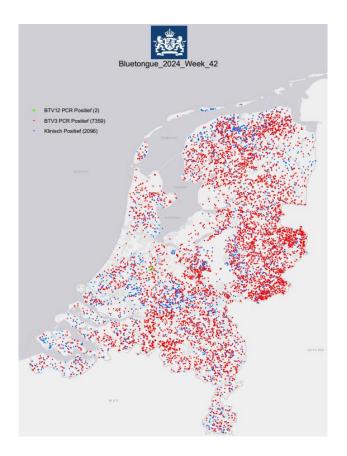


Figure 2 detailing cases of BTV-3 and BTV-12 in The Netherlands (as of 21/10/2024). Map available at Bluetonque positive by place of residence 2024 | Map | NVWA

Vaccination against BTV-3 now approved in GB and EU member states

- Vaccination for BTV-3 has been authorised as an emergency measure in countries where BTV-3
 is circulating. These vaccines have not yet obtained European Marketing Authorisation, nor have
 they determined an immunity period guaranteed in the specifications of the vaccine.
- 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 now been authorised as an emergency measure in some countries including The Netherlands, Germany, Belgium, France, Luxembourg and most recently Great Britain.
- 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.
- 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.

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**.
- Temperature plays a key role in bluetongue transmission. Warmer temperatures throughout
 the Summer and into the Autumn months, increase the risk of bluetongue transmission during
 this time. In Winter when temperatures are lower, the transmission risks are lower.
- It is critical that **all livestock farmers maintain vigilance** for any suspicions of bluetongue, and report any such suspicions to their local Regional Veterinary Office (RVO) without delay.

Situation in Europe

- BTV-3 is currently circulating widely in The Netherlands, France, Belgium, Germany, Luxembourg, Denmark, Switzerland, Italy, Sweden, Norway, Austria, Portugal and the Czech Republic.
- Other strains of the disease are also present in Southern 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.
- Bluetongue serotype-12 has been detected in The Netherlands (October 2024).

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. Midge activity reduces in colder temperatures.
- A wide range of **clinical signs** are associated with bluetongue, such as:
 - o Fever
 - Inappetence (loss or lack of appetite)
 - 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
 - Discharge from the eyes and/or nose
 - o Lameness
 - Abortion or deformities in offspring/foetus
 - o In severe cases, death can result

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

- The incubation period of bluetongue virus is approximately 1-2 weeks, although it can vary.
- Once the virus enters the midge population, eradication becomes very difficult requiring very high vaccination uptake levels maintained over a period of several years.
- 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.

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. **The Department will not pay compensation** for any imported animals which subsequently test positive for bluetongue post-entry into Ireland, or for animals infected by bluetongue virus by imported germinal products.

- 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.
- 5. The BTV-3 vaccine is not an authorised vaccines and is being used under emergency measures. 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.
- 6. 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.
- 7. 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. Ensure that animals 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.

9. <u>Post-entry testing requirements:</u>

Two blood sampling are performed on each animal arriving in Ireland, as part of post-entry testing requirements by the RVO. The 1st blood sample is taken within 5 days of arrival to Ireland, and the 2nd sample is taken 10 days after the 1st sample. Any positive results will require immediate action to be taken with appropriate guidance provided by the National Disease Control Centre (NDCC).

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

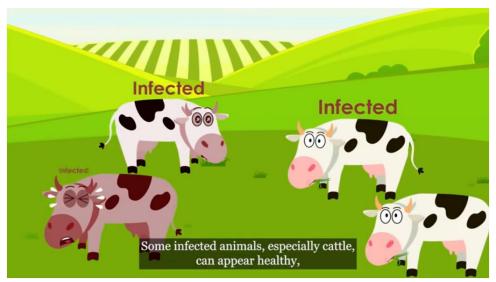


Figure 1 Watch a short video on 'How to keep Bluetongue out of Ireland' by clicking here

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.

National Disease Control Centre 22nd October 2024