

Bluetongue (BTV-3) virus in ruminants

What is bluetongue? In England, Scotland, Wales and Northern Ireland, bluetongue, including BTV-3, is a notifiable disease, so anyone suspecting the disease **MUST** act and report it to the Animal and Plant Health Agency (APHA) 03000 200 301 or DAERA in NI

Which species are affected?

Bluetongue virus (BTV-3) affects cows, goats, sheep, deer, and camelids - such as llamas and alpacas.

How is it spread? The virus can be spread long distances by wind dispersal of infected biting midges and through the import or movement of infected animals, their germplasm (sperm and eggs) and foetuses.

Clinical signs of bluetongue

Sheep

Sheep are more likely to show obvious clinical signs of bluetongue, these include:

- Ulcers or sores in the mouth and nose
- Discharge from the eyes or nose and drooling from the mouth
- Swelling of the lips, tongue, head and neck and the coronary band (where the skin of the leg meets the horn of the foot)
- Other clinical signs:
 - Red skin as a result of blood collecting beneath the surface
 - Fever
 - Lameness
 - Breathing problems
 - Abortion
 - Death

Cattle

Signs of the disease include:

- Lethargy
- Crusty erosions around the nostrils and muzzle
- Redness of the mouth, eyes and nose
- Reddening of the skin above the hoof
- Nasal discharge
- Reddening and erosions on the teats
- Fever
- Milk drop
- Not eating
- Abortion

Adult cattle may serve as a source of virus for several weeks while displaying little or no clinical signs of disease and are often the preferred host for insect vectors.

Calves

Calves can become infected with bluetongue before birth if the mother is infected while pregnant.

Signs of infection include:

- Calves born small, weak, deformed or blind
- Death of calves within a few days of birth
- Abortions

Livestock keepers and vets should consider bluetongue as a possible cause for calves showing these signs.

Pictures of sheep with bluetongue



This sheep has a high temperature, reddening of the mouth and lining of the nose. The lips, tongue and face are swollen



Foot of a lame sheep with BTV. Note the reddening of the skin at the top of the horn (coronary band). In some cases, horn may slough off



This is an image of the roof of the mouth (hard palate) of a sheep with BTV. Note there are blood spots (haemorrhages) on the ridges of the palate and also on the lips



A sheep with BTV. Note the swelling (oedema) of the muzzle and face and the crusting and discharge around the nose

Bluetongue hotline: 024 7771 0386 available 9-5 on Mon-Fri
Bluetongue hub: www.ruminanthw.org.uk/bluetongue-virus

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What can you do?

Advice to farmers and their vets remains three-fold:

- Farmers need to **beware** when buying animals in
- **Take action** to report any signs, and always,
- Remain **vigilant** and monitor livestock closely.

Can I move my animals?

If it is essential for you to move animals, please observe the following information on licensing

1. View the live [APHA interactive bluetongue virus map](#) to find latest information on BTV zones e.g. Restricted Zones (RZ) and Temporary Control Zones (TCZs).

2. If you are in a RZ or TCZ find latest movement and licensing information on the Defra website [Move animals according to the latest updates](#) - remembering all movements must also comply with your normal movement licence

Is a vaccine available?

- Defra's Secretary of State has authorised the use of three unauthorised BTV-3 vaccines in the UK under licence
- Unlike authorised vaccines for other BTV serotypes, these BTV-3 vaccines aim to reduce viraemia rather than prevent infection or transmission. They may reduce clinical signs or mortality
- Vaccinated animals remain subject to movement controls and trade restrictions
- Discuss the suitability and merits of vaccination with your private veterinarian
- Animal keepers in England must comply with the general licence conditions when using these vaccines



For the most up-to-date information, visit the [RH&W bluetongue hub](#)



Department
for Environment
Food & Rural Affairs

For queries relating to bluetongue surveillance testing or licences, visit Defra [here](#)



Bluetongue does not affect people or food safety, but outbreaks can result in prolonged restrictions on animal movement and trade.

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