



Bluetongue virus serotype 3 (BTV-3)

About bluetongue

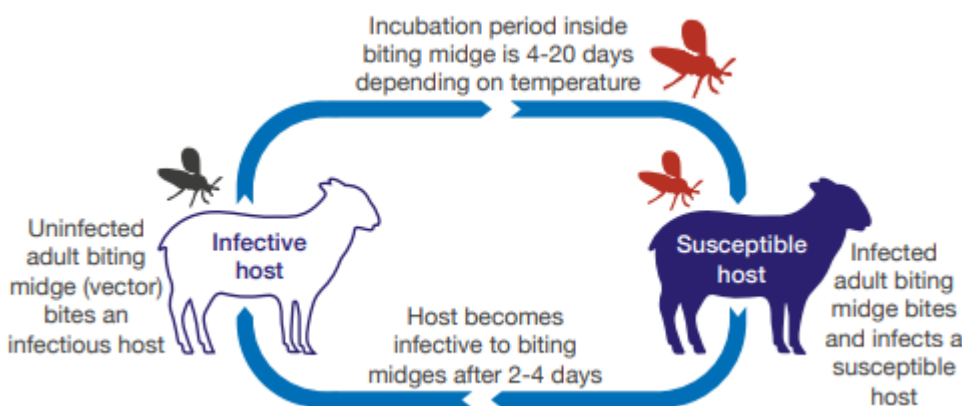
Bluetongue virus (BTV) is a notifiable disease. If you suspect signs of any notifiable diseases, you must immediately notify your [Scotland field services local office](#) at the Animal and Plant Health Agency (APHA). Failure to do so is an offence.

BTV is an exotic notifiable viral disease affecting ruminants (such as sheep, cattle, goats, deer) and camelids (such as alpacas, llamas). BTV can be spread long distances by wind dispersal of *culicoides* midges. Midge bites are the most common way for the virus to spread to livestock, but BTV can also spread through the import or movement of infected animals, their germplasm (semen and ova), embryos and fetuses.

The first report of BTV serotype 3 (BTV-3) was in the Netherlands in September 2023, and it has since been found in other Northern European countries. The first case in England was on 10 November 2023, and multiple cases have been detected since, via surveillance in the south-east and east of England. **There is currently no vaccine for BTV-3.**

BTV does not affect people or food safety. Meat and milk from infected animals is safe to eat and drink. However, it can cause significant damage to livestock populations and is considered a risk to the agricultural sector, including causing international trade restrictions.

BTV transmission cycle



Clinical signs

Sheep are more likely to show obvious clinical signs of BTV than cattle if they become infected. Signs include: ulcers or sores in the mouth and nose; discharge from the eyes or nose and drooling from 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); red skin, as a result of blood collecting beneath the surface; fever; lameness; breathing problems; abortion; death.

In cattle, clinical signs include: lethargy; crusty erosions around the nostrils and muzzle; redness of the mouth, eyes, 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 can become infected with BTV before birth if the cow is infected while pregnant. Signs of infection include: calves born small, weak, deformed or blind; death of calves within a few days of birth; and abortions.

Livestock keepers and vets should consider BTV as a possible cause for calves showing these signs. **BTV is a notifiable disease. If you suspect signs of any notifiable diseases, you must immediately notify your Scotland [field service local office at the Animal and Plant Health Agency \(APHA\)](#). Failure to do so is an offence.**

To see a full list of clinical signs of BTV and pictures, please visit www.gov.scot/bluetongue.

Epizootic haemorrhagic disease

Epizootic haemorrhagic disease (EHD) affects deer, cattle and other ruminants (animals that chew cud, such as goats, sheep) **and has similar clinical signs to BTV**. It does not affect humans or food safety. The disease can cause large outbreaks in susceptible animals, which can result in trade and movement restrictions. Outbreaks of EHD in cattle were reported for the first time in southern Europe in November 2022, and cases have now been identified as far north as the La Loire region of France. It is not currently present in the UK.

Don't think twice. It is better to be safe. **If you have any suspicion of disease, please speak to your vet and contact APHA immediately.**

Why are there cases of BTV in England?

The most likely cause of the current cases detected in England in 2023/24 is midges infected with BTV-3 blown across from continental Europe. There is no evidence that the virus is currently circulating in the UK midge population, and we are currently in the official Seasonal Low Vector Period, which means the midge population in Great Britain (GB) is considered not currently active enough to transmit disease. When temperatures rise this

coming spring, this period will end as soon as our insect monitoring shows that midges are active again.

To understand if BTV is present in livestock in GB, APHA undertake an annual risk-based surveillance survey of farms in high-risk counties along the south and east coast of England. This is in conjunction with surveillance of imported animals and any suspect clinical cases.

Trade and vaccination

Due to cases of BTV-3 in England, Great Britain has lost its disease-free status. Therefore, trade in live ruminant animals with the EU and movements to Northern Ireland (NI) are currently suspended. The duration of this suspension is dependent on a vaccine becoming available, regionalisation being pursued and approved, or regaining disease freedom, which can take two years. Exercise caution and consider the purpose of buying livestock before planning to trade out with GB. If exporting germplasm out with GB, discuss with your vet to ensure you can meet the Export Health Certificate (EHC) requirements and any additional safeguarding measures (e.g. testing donor animals before and after collection of semen before it is released for use).

You can vaccinate against BTV-4 and BTV-8 serotypes, but these vaccines do not protect against BTV-3. There is no vaccine for BTV-3, which is the serotype currently detected in England and northern Europe.

Controlling the spread of bluetongue

Disease control zones

To minimise the spread of BTV, disease control zones may be put in place to restrict movements of susceptible animals, and thus potential disease spread, out of those zones. If your farm is in an area declared as a zone, you will be contacted by APHA, and updates will be posted on www.gov.scot/bluetongue.

Movement of animals

Movement of susceptible animals into, within and out of any disease control zones are tightly controlled to prevent disease spread, and are generally only permitted where approved under a licence issued by APHA. Some of these restrictions may be relaxed during seasonal vector low periods and will be kept under review as circumstances change. Infected animals for slaughter may only be transported to designated abattoirs under a licence.

Registration

If you keep livestock (including those kept as pets), you are considered to have a 'holding' and must register with the Scottish Government's Rural Payments and Inspections Division (RPID) to get a County Parish Holding (CPH) number, and with the Animal and Plant Health Agency (APHA) to get a flock or herd mark. RPID will register the land you use on a permanent basis; APHA will register any additional seasonal/temporary arrangements you make use of for your animals. Your flock or herd mark is then used

along with a unique identifier to individually mark your animals (usually with a tag). Please ensure you register all land and buildings used to keep livestock, even short term lets, so that government knows where livestock are kept and can trace them to help prevent and control disease. Visit www.ruralpayments.org

What happens if I have a BTV positive animal?

There are currently no positive BTV-3 infected animals in Scotland. The livestock keeper is always notified before a case is made public. Infected animals may be humanely culled to reduce the risk of disease transmission if government considers there is a risk they may spread disease further, and compensation will be paid for any animals culled. All susceptible animals in a herd found with a positive animal will be tested, which includes those at different locations. Negative animals will be monitored and may be retested as required. This may include entire males, the semen of which may be infectious for an extended period of time, even after the animal is no longer sick and has developed immunity itself. As maternal transmission is possible, the offspring of positive animals will be tested (even if they are less than 12 weeks old). All other susceptible animals at the affected premises will be placed under movement restrictions until it is confirmed that no transmission has occurred. Animals that have moved from the infected herd during the period at risk, will be traced and sampled.

Receiving results after sampling

Livestock keepers with BTV positive animals will be notified as soon as results are available (often within 48 hours of the samples being taken upon clinical suspicion, but this could take longer for more remote areas, and up to 5 working days for surveillance samples). In the event there was a disease control zone in Scotland with a large number of tested animals, we may only tell keepers if they have a positive result, and keepers who have not been notified can assume the results are negative if they have not heard from APHA five working days after sampling.

To keep up to date with the latest news, sign up to the APHA Alerts Service: www.gov.uk/guidance/apha-alert-subscription-service

To find out more about bluetongue and the latest situation visit: www.gov.scot/bluetongue

The Ruminant Health and Welfare Group's website is updated regularly with BTV information and resources: <https://www.ruminanthw.org.uk/bluetongue-virus>