



Bluetongue

Strathspey Monitor Farm Meeting
Carrbridge, 13 November 2025

Antonia.Brusauer@apha.gov.uk

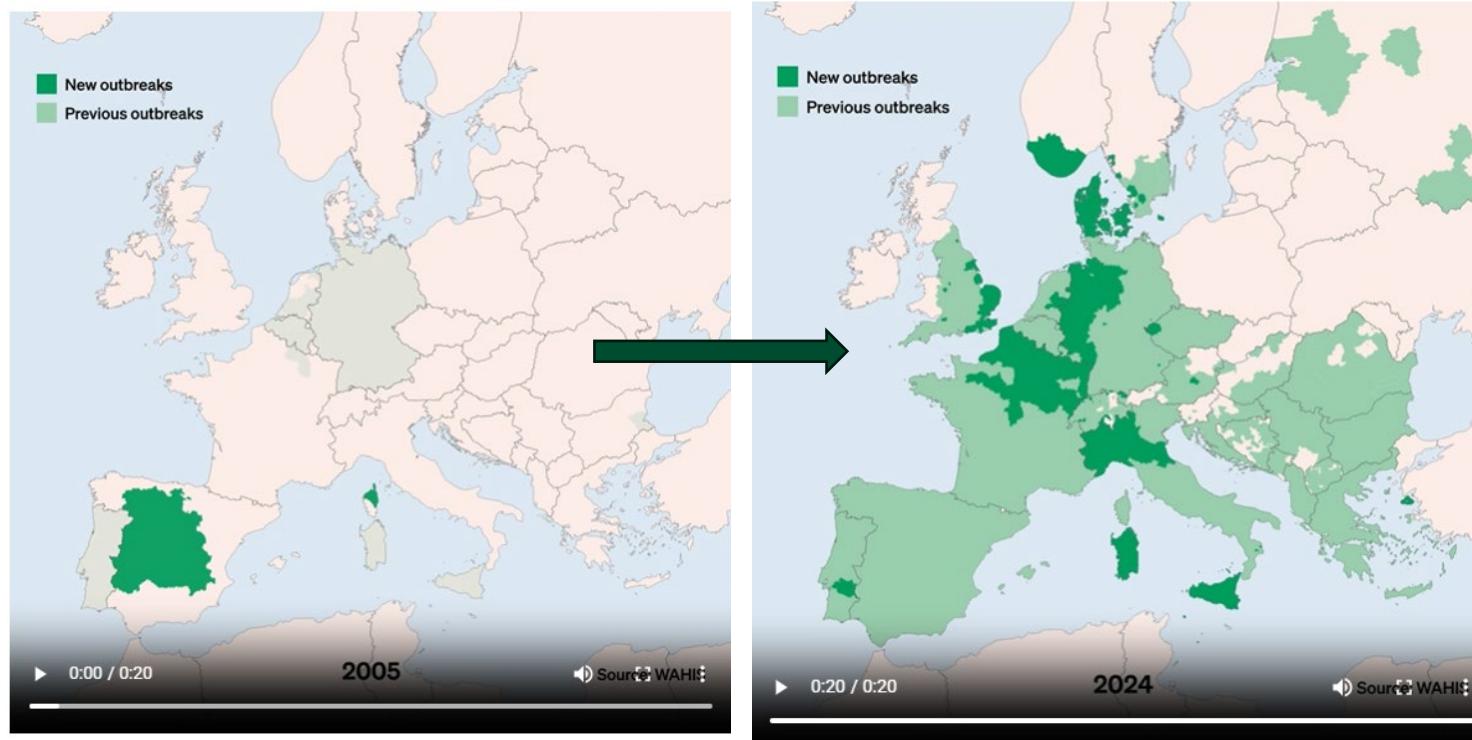


Animal &
Plant Health
Agency

Why we care about Bluetongue virus (BTv)

Bluetongue in Europe: How climate change is shifting disease patterns

Map 1: The spread of bluetongue in Europe (2005 - 2024)

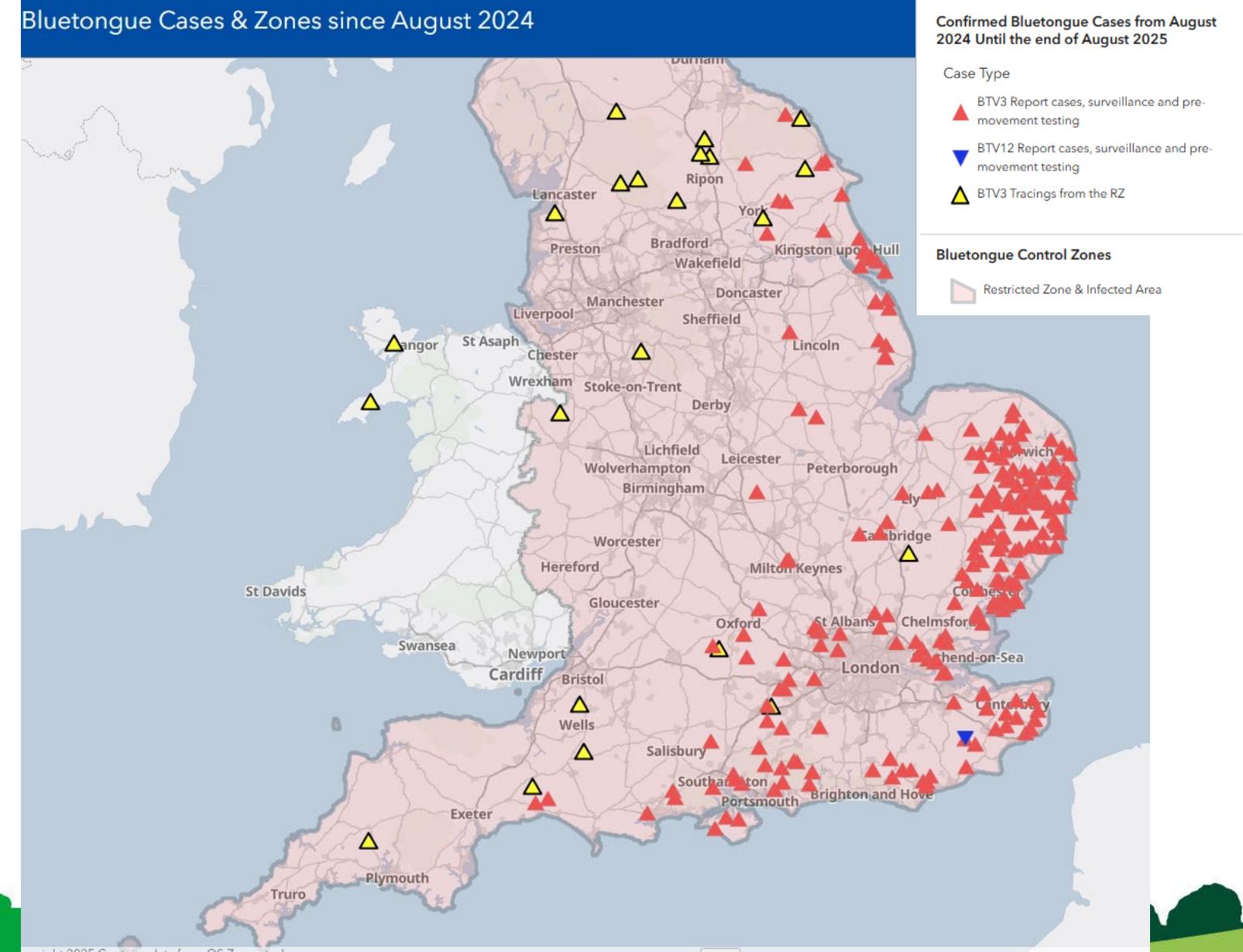


- Animal **welfare** – painful!
- Animals are **sick** and can **die**
 - decreased **productivity**
 - decreased **sustainability**
 - decreased **food security**
- **International trade** → can not export!
- **Looks like Foot & Mouth Disease (FMD)**

BTV Situation GB - 2024/25 Vector Season

Bluetongue Cases and Zones

BTv3 = 262
BTv12 = 1



BTV Situation GB – 2025/26 Vector Season

[APHA Interactive Bluetongue Virus Map](#)

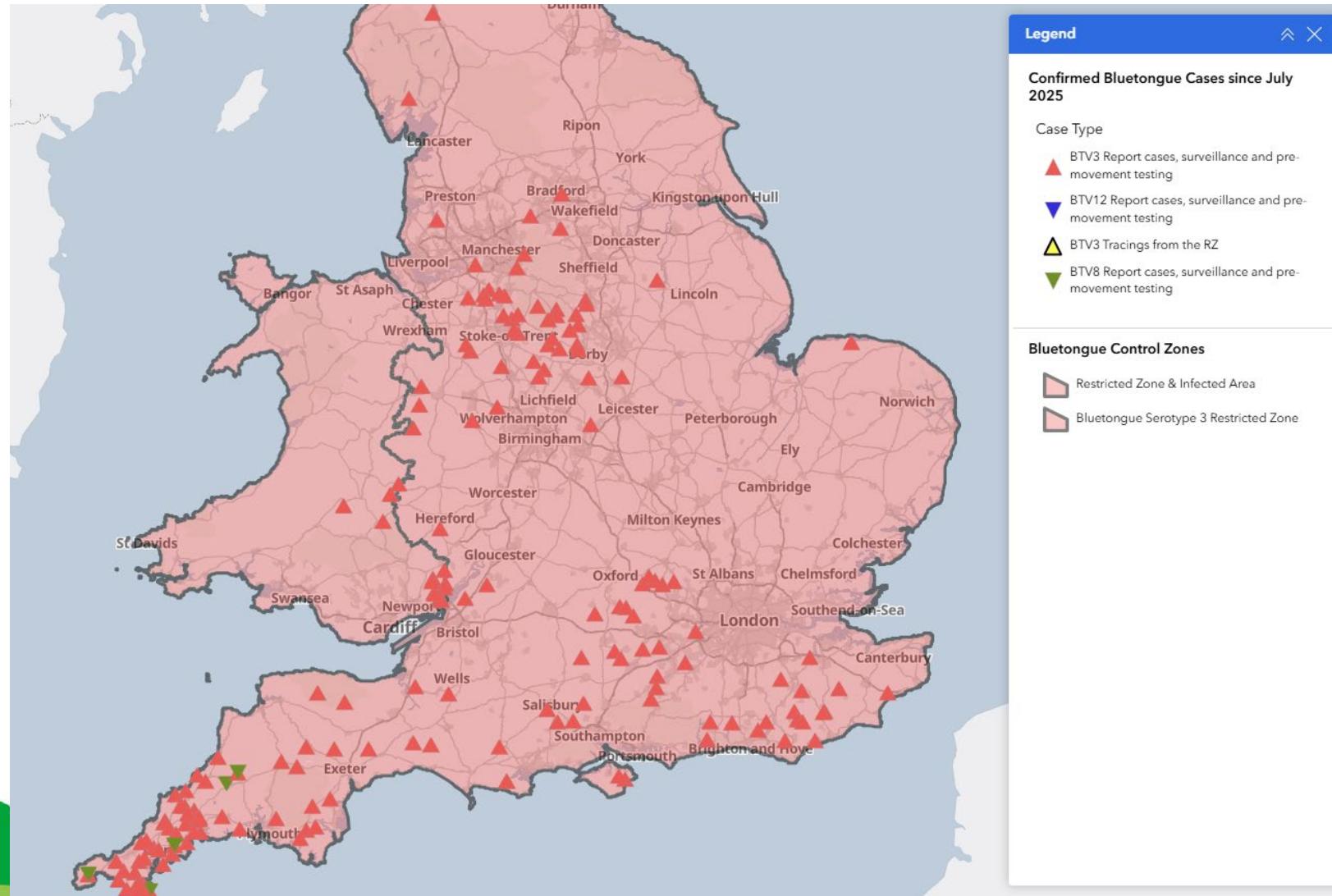
BTV3 restricted zone (BTV3 RZ)
1 July:
ALL ENGLAND
10 November:
ALL WALES

Total 172 cases of BTV (12 Nov 25)

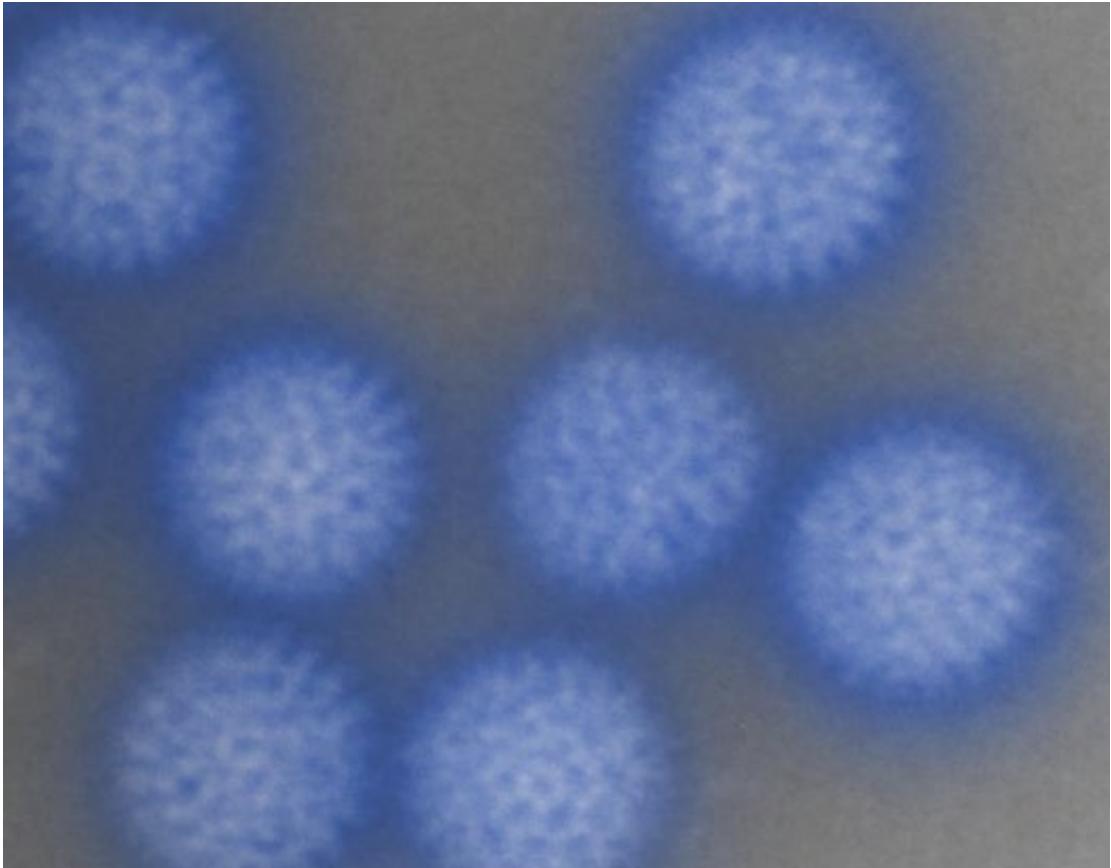
England: 159 cases
(145 BTV 3, 1 BTV-8, 5 cases of both BTV 3 and BTV 8)

- **Wales: 13 cases of BTV-3**
- **no cases in Scotland**

[Bluetongue Cases and Zones](#)



A bit about the Bluetongue virus



Source: [Bluetongue virus | Virus | The Pirbright Institute](#)

Genetic information in **10 segments**

→ BTV can **reassort**, swapping genome segments.

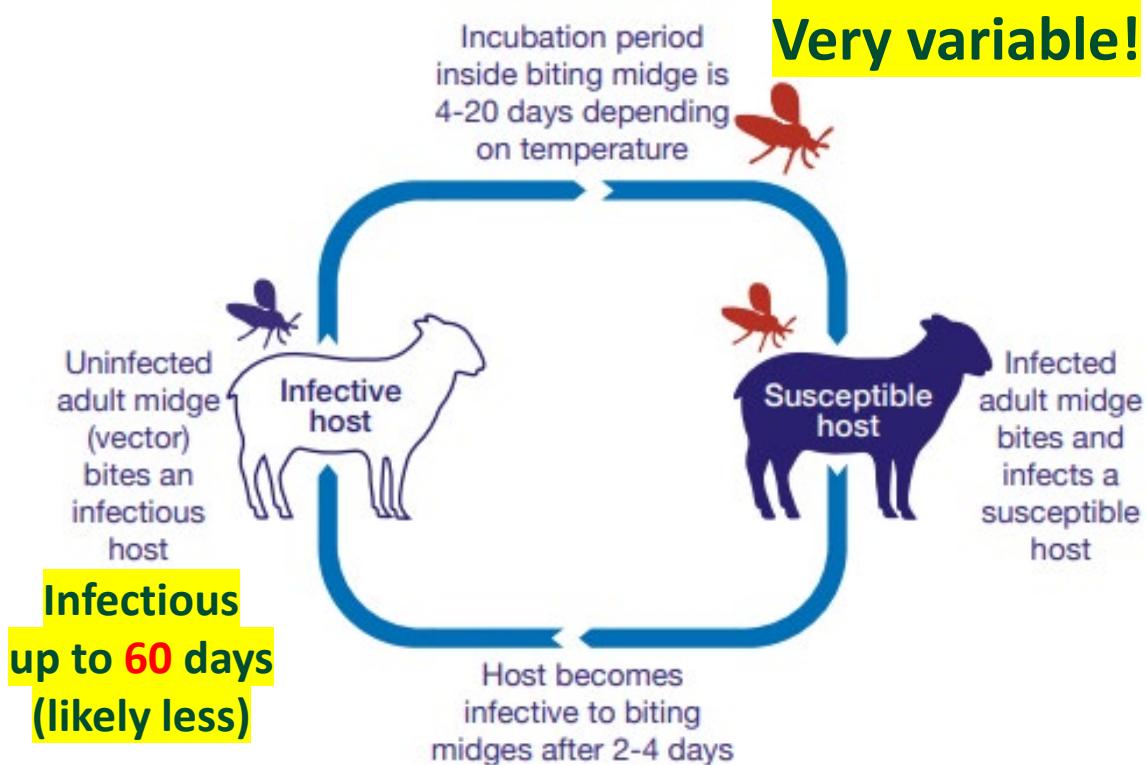
→ **new BTV strains** with different characteristics

→ **Vaccine** may become **ineffective!**

Currently at least 27 different types of virus....

A bit about Bluetongue disease transmission

BTV transmission cycle



The virus can also be transmitted via infected germinal products (semen, ova, and embryos) as well as passed on maternally from mother to unborn offspring.

Transmission only if

- a midge ingest BTV
- BTV multiplies in the midge
- BTV travels from gut → salivary gland in midge

Duration of this process = dependent on ambient temperature

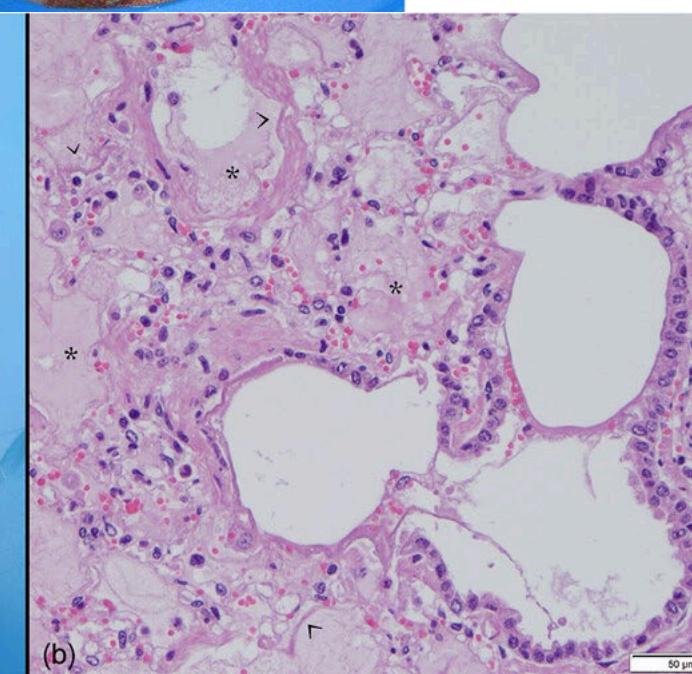
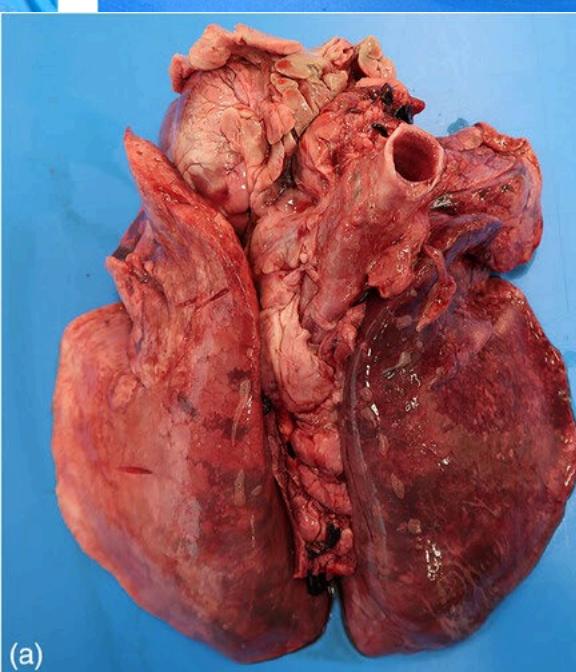
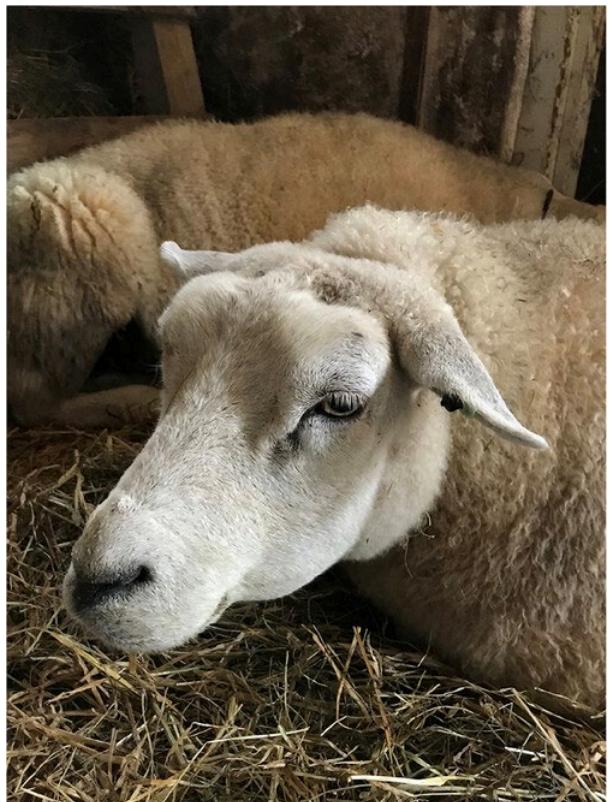
→ above 11-13 C

The higher the temp, the faster the process!

→ Approx 15 C → Local transmission

Source: [Key information about bluetongue](#)

Bluetongue virus serotype 3 in ruminants in the Netherlands:
Clinical signs, seroprevalence and pathological findings - den
Brink - 2024 - Veterinary Record - Wiley Online Library





Volume 196, Issue 4
15/22 February 2025
e4910

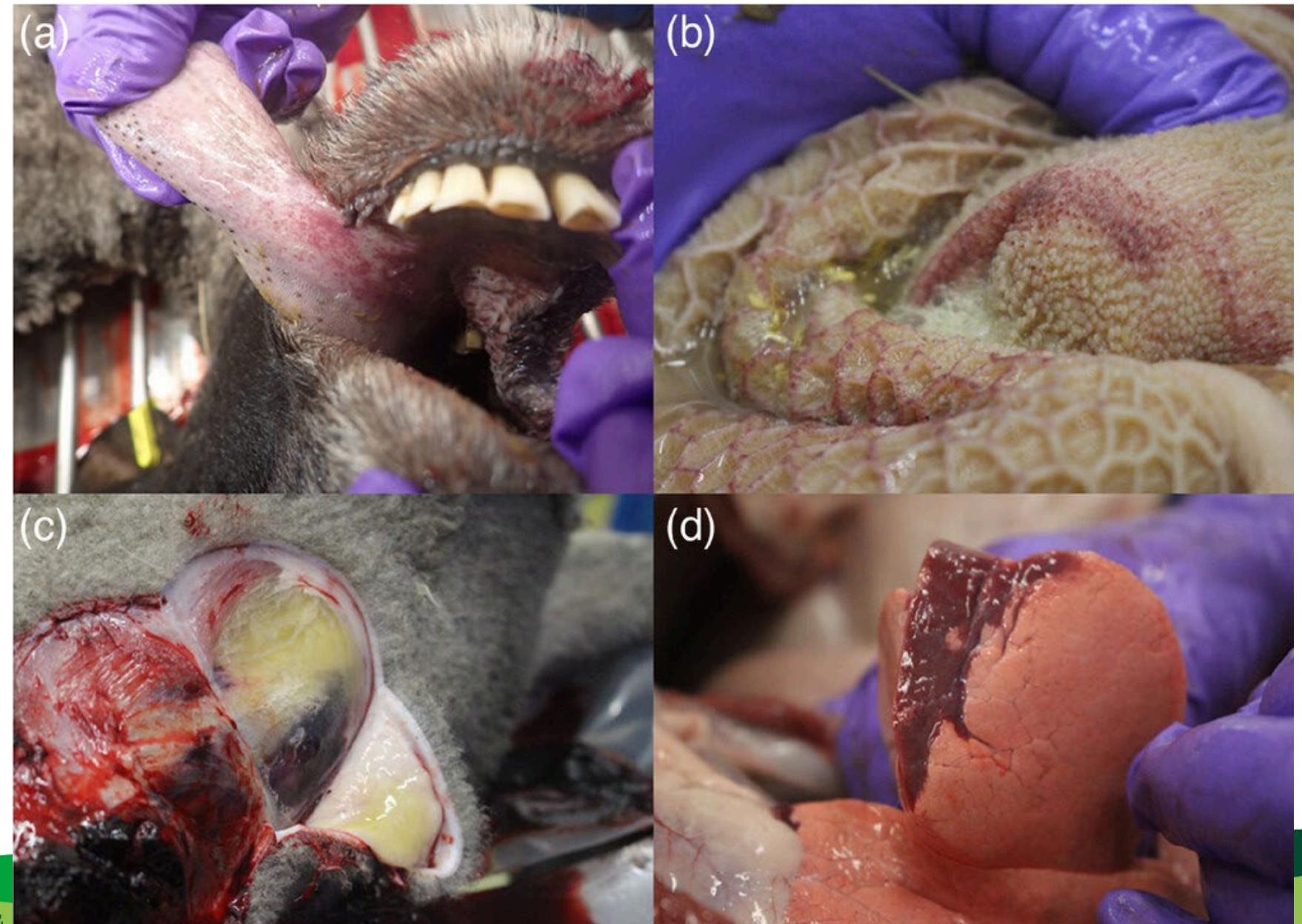
Clinical disease in British sheep
infected with an emerging strain
of bluetongue virus serotype 3 -
Newbrook - 2025 - Veterinary
Record - Wiley Online Library



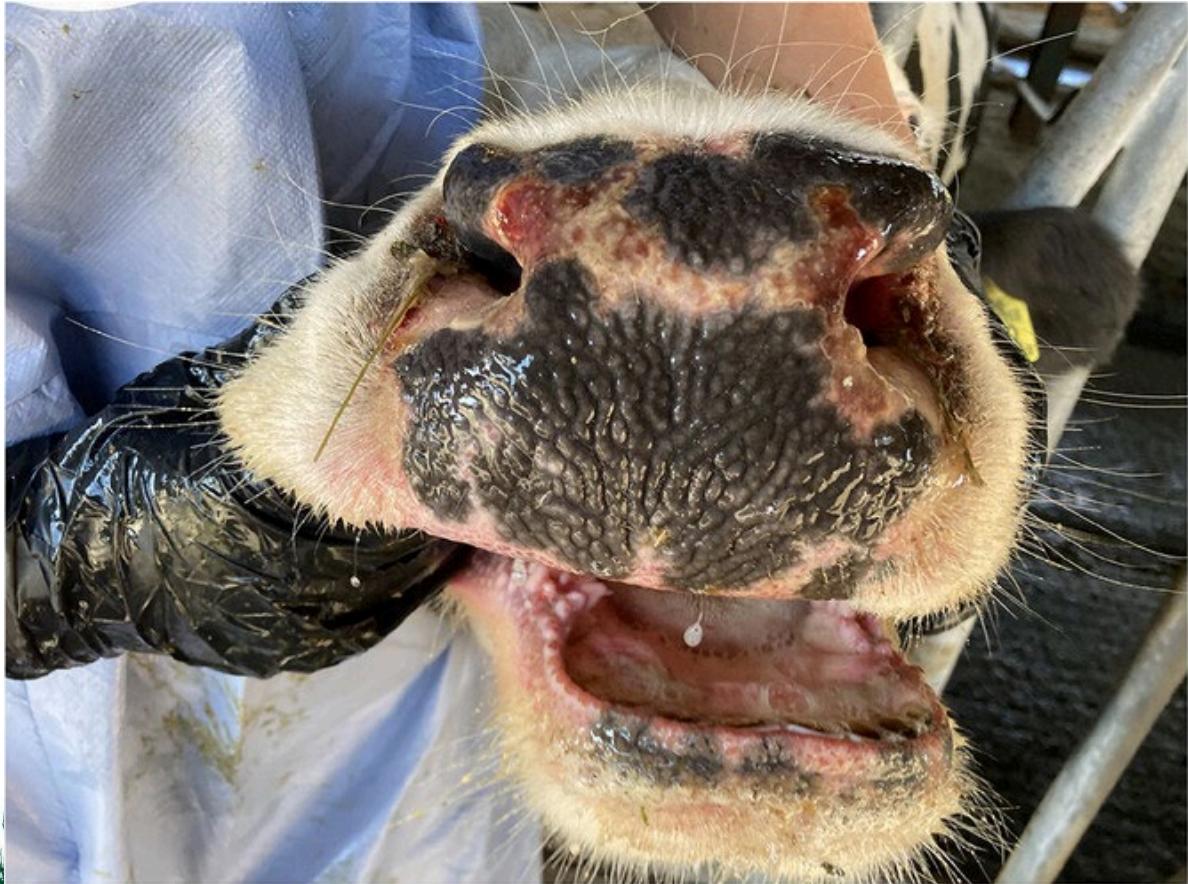


Volume 196, Issue 4
15/22 February 2025
e4910

Clinical disease in British sheep
infected with an emerging strain
of bluetongue virus serotype 3 -
Newbrook - 2025 - Veterinary
Record - Wiley Online Library



[Bluetongue virus serotype 3 in ruminants in the Netherlands:
Clinical signs, seroprevalence and pathological findings - den
Brink - 2024 - Veterinary Record - Wiley Online Library](#)



Volume 195, Issue 4
17–31 August 2024
e4533

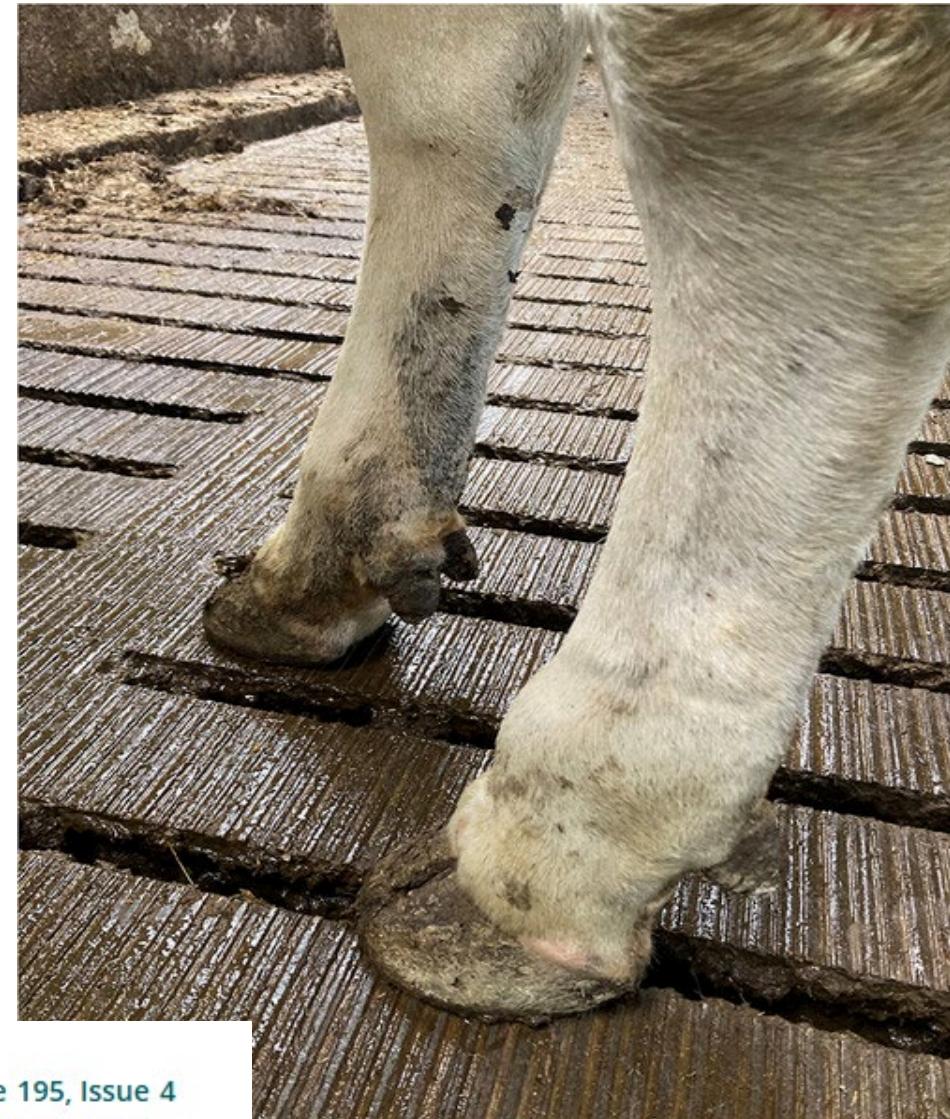
[Bluetongue virus serotype 3 in ruminants in the Netherlands:
Clinical signs, seroprevalence and pathological findings - den
Brink - 2024 - Veterinary Record - Wiley Online Library](#)



Volume 195, Issue 4

17–31 August 2024

e4533



Bluetongue infection (adult)cattle

One of the main clinical signs noted

→Laminitis / Lameness

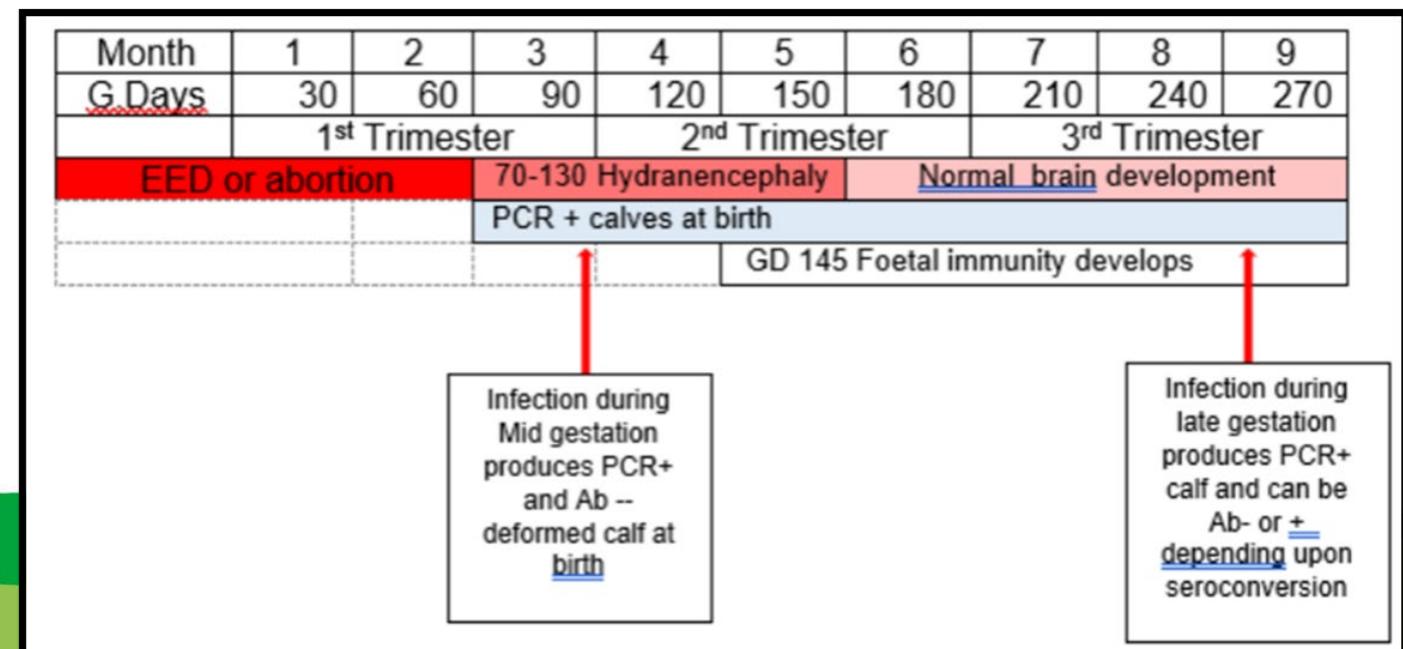
Thanks to Keith Powell,
Barefoot Vets



Bluetongue infection and fertility

Causes

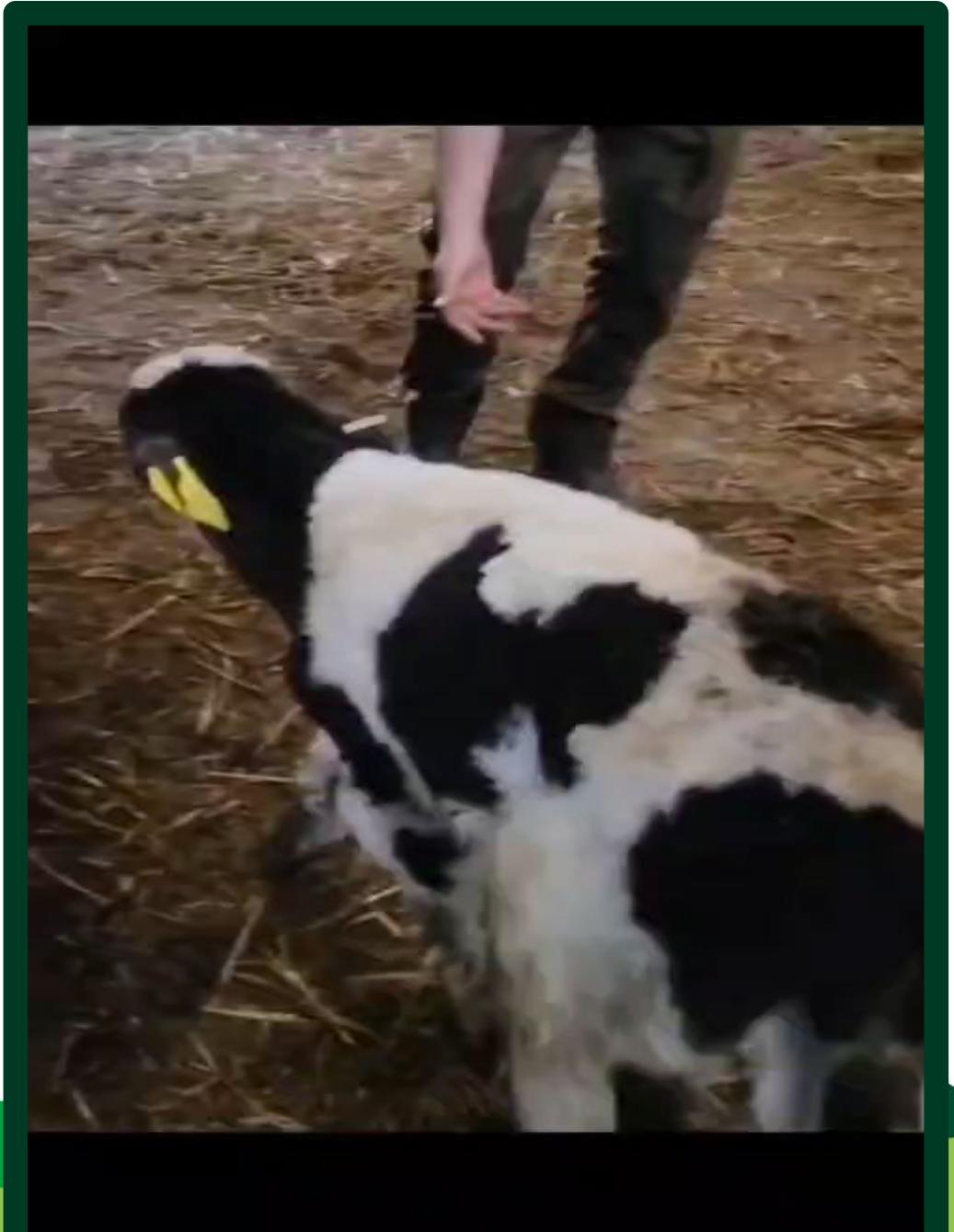
- Abortions and still births
- Brain deformities → “cavitating” lesions (i.e. the main part of the brain becomes hollow/fluid filled)
- Calves born virus positive (may or may not be clinically ill)
 - Not persistent like BVD
 - Usually those infected later in gestation



Bluetongue “Dummy” calves

- Weak @ birth
- No suckling reflex
- Blind
- Stargazing
- Robotic, wide-based gait
- Difficulty standing
- Circling
- Head pressing...

Thanks to Annalisa Loria,
APHA Bury St Edmunds

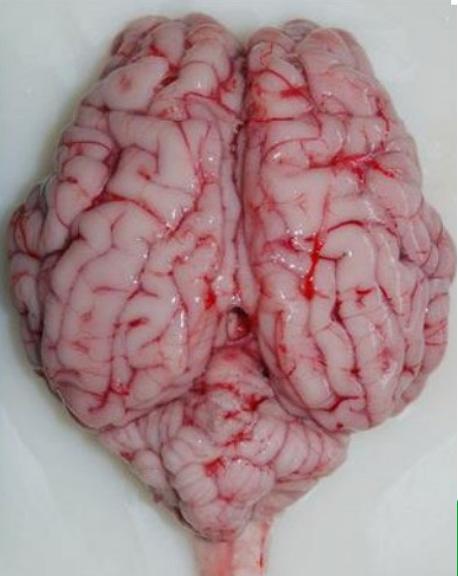


Bluetongue “Dummy” calves

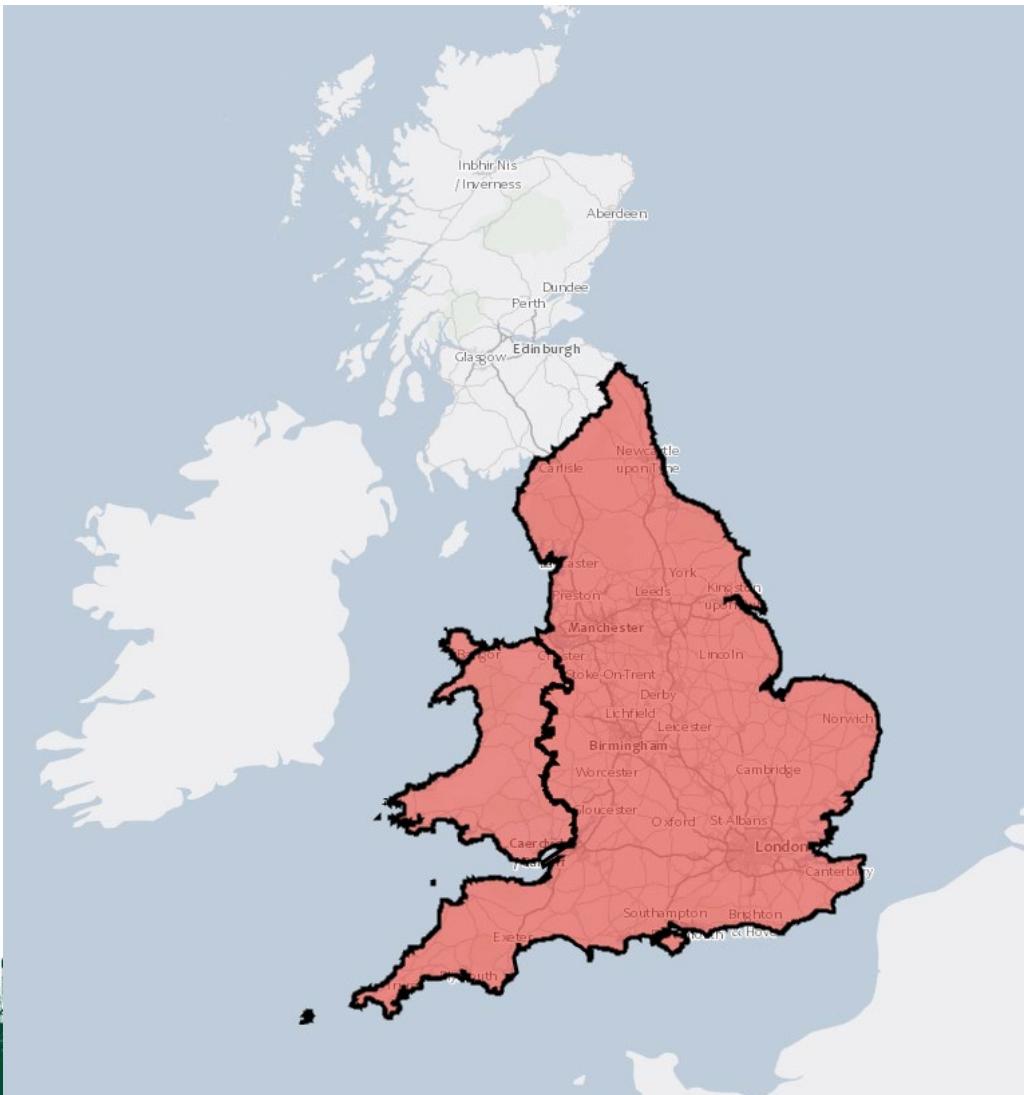
Post-mortem findings:

Complete loss of brain tissue
→ Large fluid filled cavity

Thanks to Annalisa Loria,
APHA Bury St Edmunds



All – England and now Wales BTV3 RZwhat does this mean for Scotland?



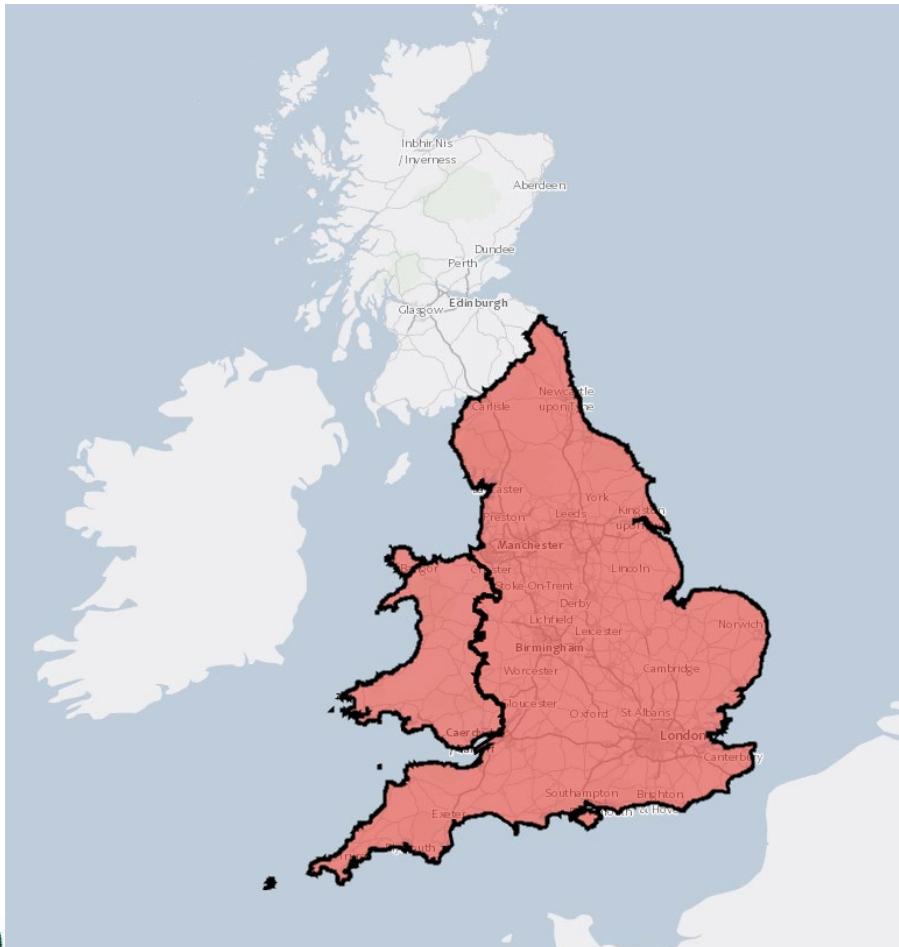
RESTRICTED MOVEMENTS for

- ***Ruminants***
Cattle
Sheep
Goats
Deer
- ***Camelids***
Llama
Alpaca

[Bluetongue movement
restrictions for animals -
Bluetongue: how to spot
and report the disease -
gov.scot](#)

Ruminant Health and
Welfare's [Bluetongue
Movement checker](#) for
guidance on movements
into or out of the RZ.

All- England and Wales BTV3 RZwhat does this mean for Scotland?



[Bluetongue: general licences to move animals and germinal product from the restricted zone in England to Scotland or Wales - GOV.UK](#)

Moving animals or germinal product from England to Scotland, follow the [guidance on movement licences and pre-movement tests in Scotland](#)

Some types of animals are exempt from pre-movement testing

Cattle can be vaccinated with Bultavo3 (full primary course 2 x and 21 days elapsed since last vaccine dose) – be careful – booster in 6mths required!



**Thank you for your attention &
the invitation to speak to this group**

**I am very grateful to APHA and veterinary colleagues
who contributed to BTV research and kindly made material available for
this presentation**