

Blue Tongue & Other Exotic Diseases of Sheep

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NATIONAL SHEEP CONFERENCE 2026

Thursday, 18 June | Ballinasloe, Co. Galway

Bluetongue (BTV) and other Exotic Diseases

June 18th 2026

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SVI

National Disease Control Centre

Department of Agriculture, Food and the Marine

Agenda

- ❑ Bluetongue (BT)
- ❑ Foot and mouth disease (FMD)
- ❑ Peste des Petits Ruminants (PPR)
- ❑ Sheep pox and goat pox (SPGP)
- ❑ Germinal Products import - risk

Questions to: NDCC@agriculture.gov.ie



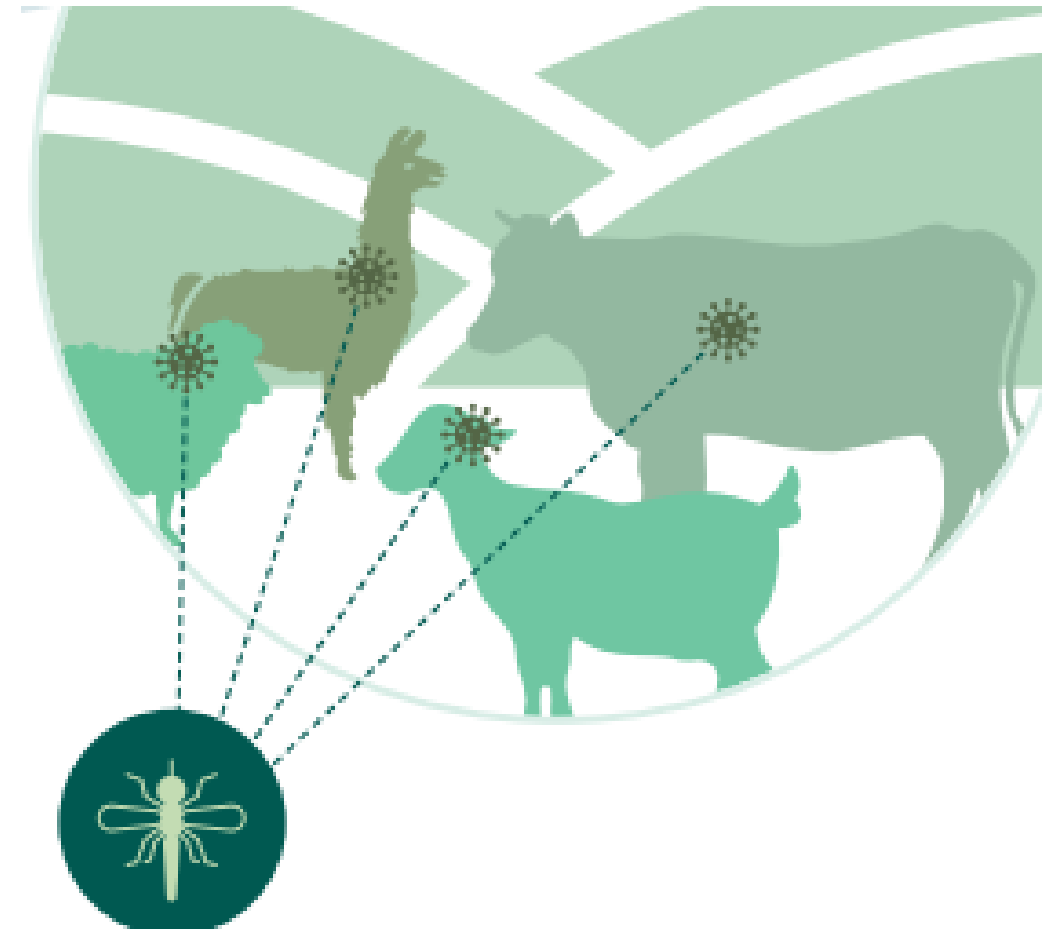
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Department of Agriculture,
Food and the Marine

Bluetongue

Answering the questions (if we can...)



- How does bluetongue spread – and when?
- Clinical signs
- Current situation re BTV
- Surveillance strategy
- Vaccination



■ Bluetongue Transmission

- Virus: 26+ Serotypes: 1, 3, 4, 8 currently circulating within Europe
- Transmission – primarily spread by biting midges
- Also: infected semen (infected rams/AI), embryos
- Transplacental: infected calves/lambs can spread new wave when born



■ Bluetongue: Replication within *Culicoides*



BLUETONGUE NEEDS A **VECTOR** TO BE TRANSMISSED

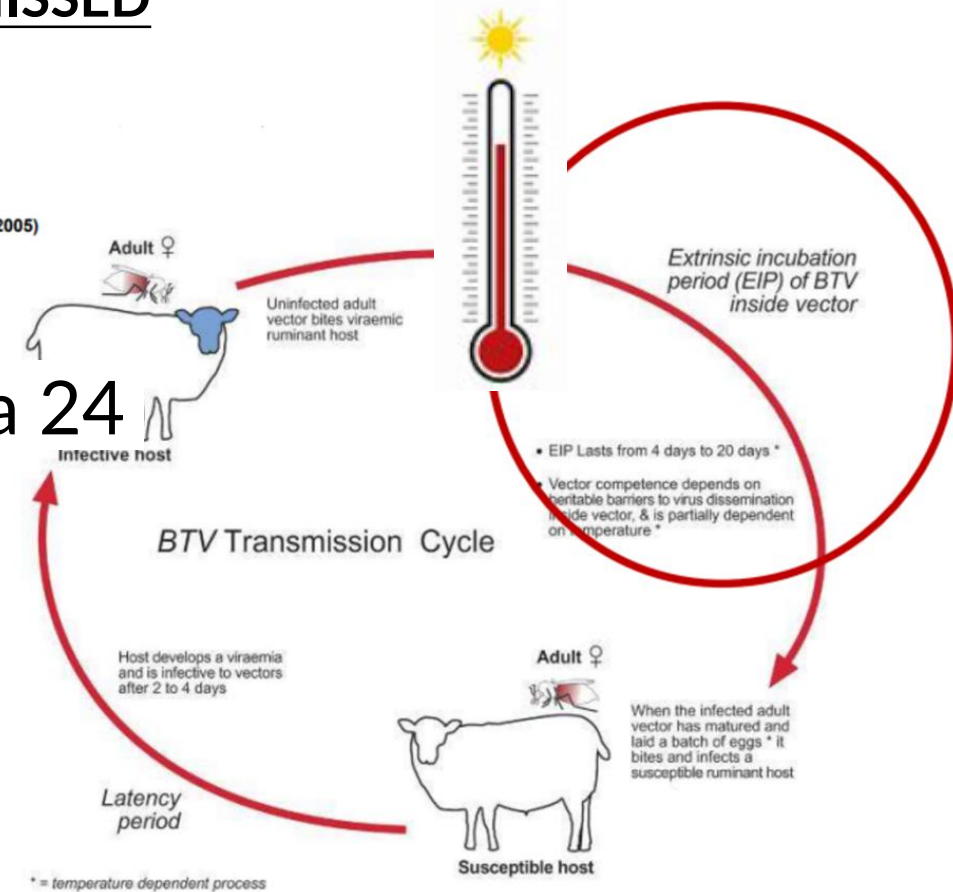
Bluetongue replication: 'Extrinsic Incubation Period (EIP)'

- 'EIP' occurs within the midge.
- Temperature dependant – 50 'degree days' (a 24 hour period $1^{\circ} > 12$ degrees)

CONCERNING MIDGES: FEMALES

- >2weeks old, seek a blood meal from a susceptible ruminant host to lay eggs.
- No evidence of transovarial transmission

(Purse et al., 2005)



What should you look out for?

- Some have no obvious clinical signs
- Fever
- Inappetence (loss or lack of appetite)
- Drooling
- Breathing difficulties if the tongue swells
- Discharge from the eyes and/or nose
- **Abortion or deformities in lambs/foetus**
- **Dummy calves/lambs**
- In severe cases, death



Swelling of the face, lips and tongue (i.e. “bluetongue”)



Credit: The Pirbright Institute.

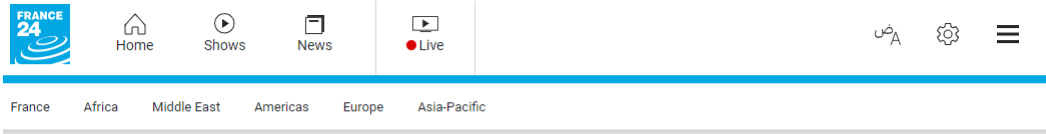


Credit: The Pirbright Institute.

What happened in the Netherlands in Autumn 2023 when BTV3 first appeared?



- 55,000 dead sheep in the first four months
- >5,000 flocks affected



Home / Live news

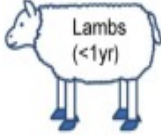
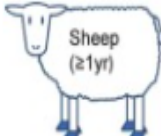
Bluetongue anguish for Dutch farmers

Oosterwolde (Netherlands) (AFP) – One sheep dribbles, another limps, a third can barely stand: the bluetongue virus is causing havoc for Dutch farmer Erik van Norel, who thought he had seen the back of it.



Vaccines mean the sheep are less sick but do not prevent them from getting the disease © Nick Gammon / AFP

Department of Agriculture, Food and the Marine

Age category	Period	Total number of dead sheep		
		2020–2022	2023	Difference
 Lambs (<1yr)	Week 1–35: BTV-3 free	31,551	29,350	-2201
	Week 36–52: BTV-3 outbreak period in 2023	14,904	35,451*	20,547*
 Sheep (≥1yr)	Week 1–35: BTV-3 free	38,657	39,480	823
	Week 36–52: BTV-3 outbreak period in 2023	11,573	46,183*	34,610*



Preventive Veterinary Medicine

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The impact of the bluetongue serotype 3 outbreak on sheep and goat mortality in the Netherlands in 2023

I.M.G.A. Santman-Berends ^a, K.M.J.A. van den Brink ^b, E. Dijkstra ^c, G. van Schaik ^{a,d}, M.A.H. Spierenburg ^e, R. van den Brom ^c

Current situation in Ireland



- Cull cow serosurveillance programme: antibody positive cow
- Herd of origin near Wexford coast: positive cow, virus and antibodies
- Epi investigation and modelling
- Source: likely infected midges blown across Irish sea

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Emergency meeting to discuss bluetongue case rescheduled

Updated / Sunday, 25 Jan 2026 15:45



Agriland

Sheep more likely to show 'obvious clinical signs' of bluetongue than cattle - DAFM

By Kathleen O'Sullivan
January 24, 2026 2:00 PM

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Bluetongue found in animal on Co Wexford farm

It is the first case of bluetongue to be confirmed in Ireland.



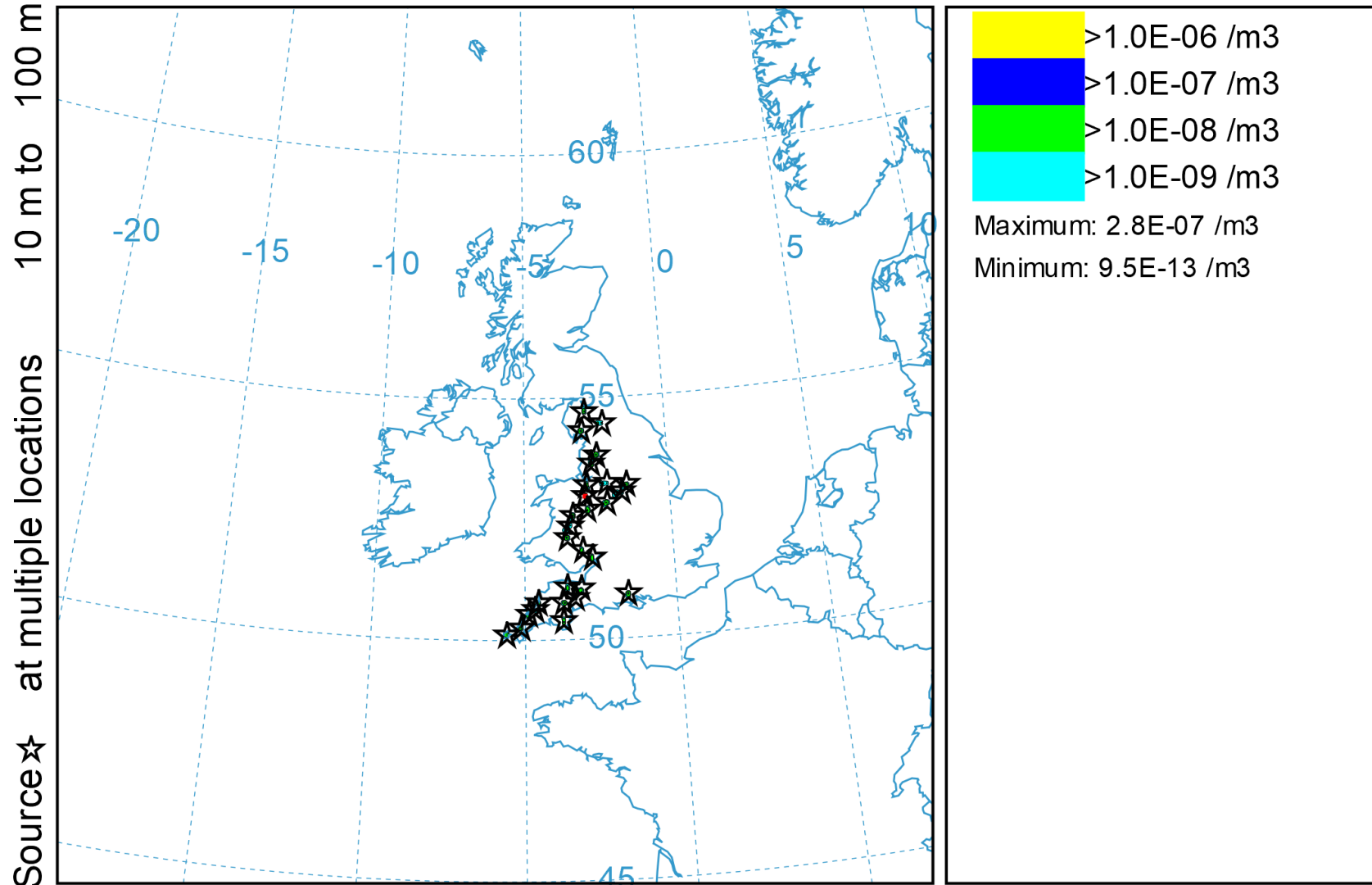
An example of a sheep with ulcerative lesion in lower lip after being infected with bluetongue.

A case of bluetongue (BTV3) has been identified in an animal on a Wexford farm.

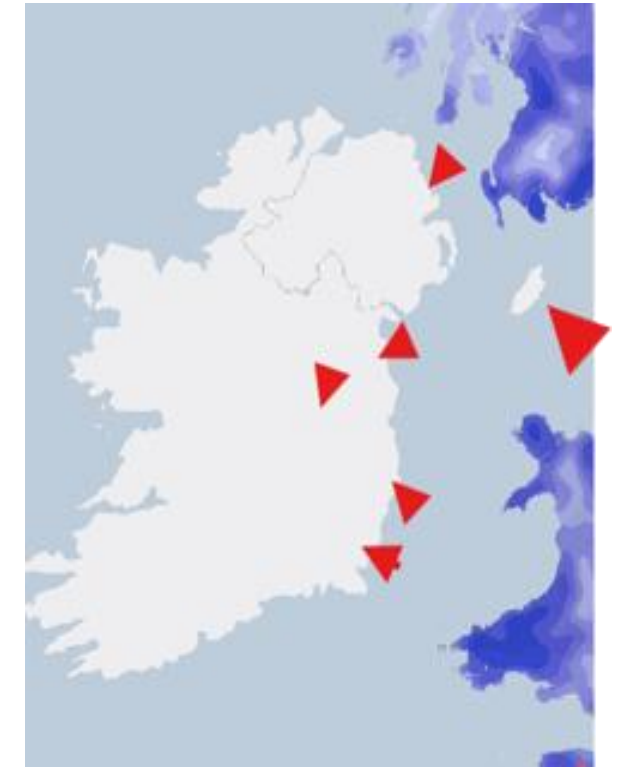
It is the first case of bluetongue to be identified in Ireland.

NOAA HYSPLIT MODEL

Concentration (/m³) averaged between 0 m and 100 m
Integrated from 2000 23 Sep to 2100 23 Sep 25 (UTC)
SUM Release started at 2000 23 Sep 25 (UTC)



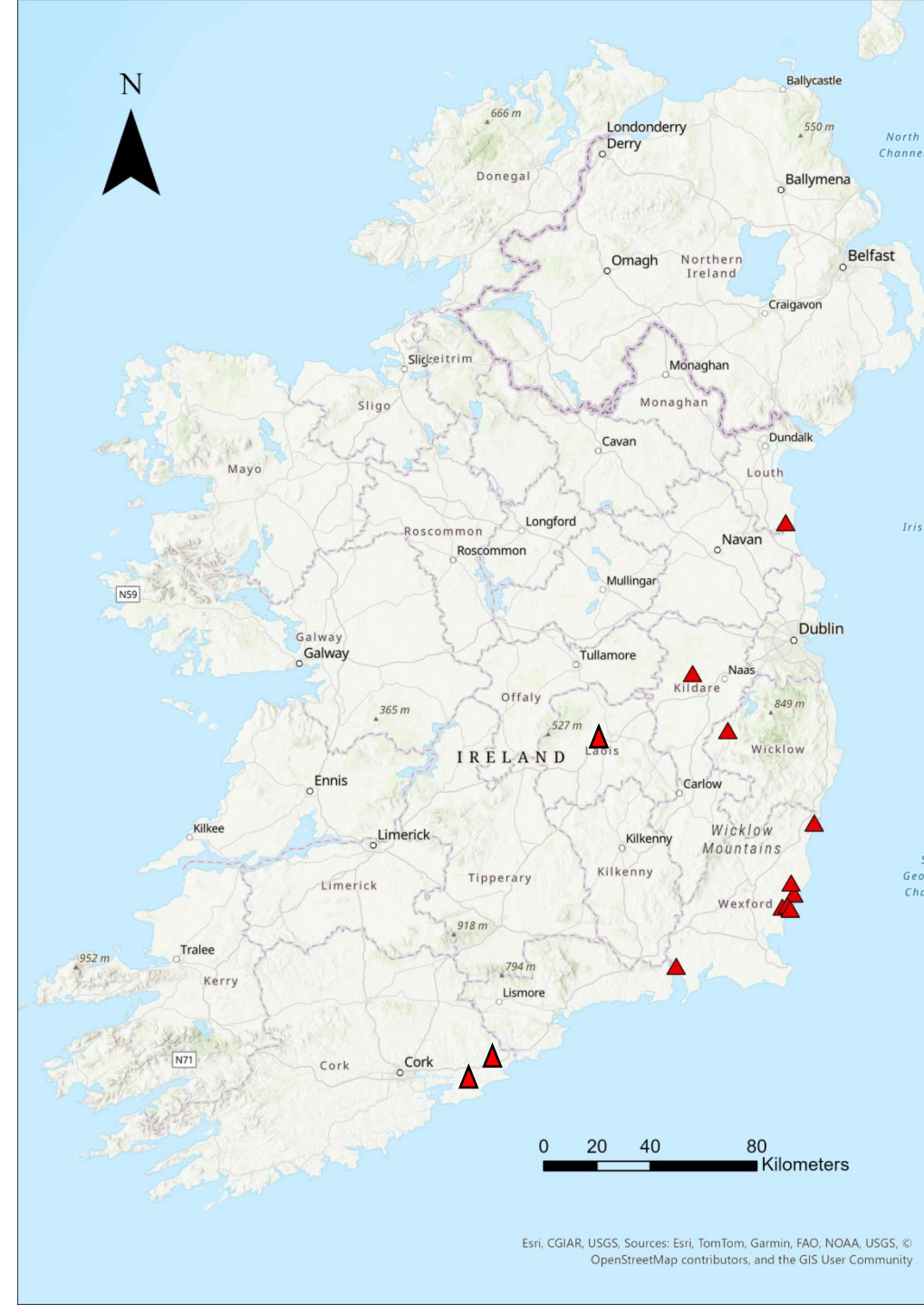
UWCW METEOROLOGICAL DATA



GIF: Courtesy of CVERA

Bluetongue – Policy June 2026

- No eradication
 - No zones
 - No movement restrictions
- **Priority:** identify geographical extent of BTV cases
- ➔ Assist farmers/PVPs in decision making regarding vaccination
- ➔ Disease surveillance



Bluetongue – Surveillance

1. National:

- Post-abortion bloods
- Regional vet lab submissions of aborted lambs, dead lambs, dead sheep
- Investigate suspects/unusual disease presentations

■2. Private: 3 private labs designated for performing private PCR testing:

- Enfer
- Farmlabs
- Animal Health Laboratories Ireland

■3. Post Import testing of animals from continental EU

BTV3 Vaccination

Bultavo-3, Bluevac-3, Syvazul BTV-3

- **Reduce** viremia, clinical signs and mortality rates (suppressive v preventative)
- No duration of immunity established *yet*



How and When to Vaccinate



- Sheep – single dose, immunity **4 weeks** later
- Immunity needed before viral exposure
- Supports included in ‘Category A’ NSWS
-



Vaccination

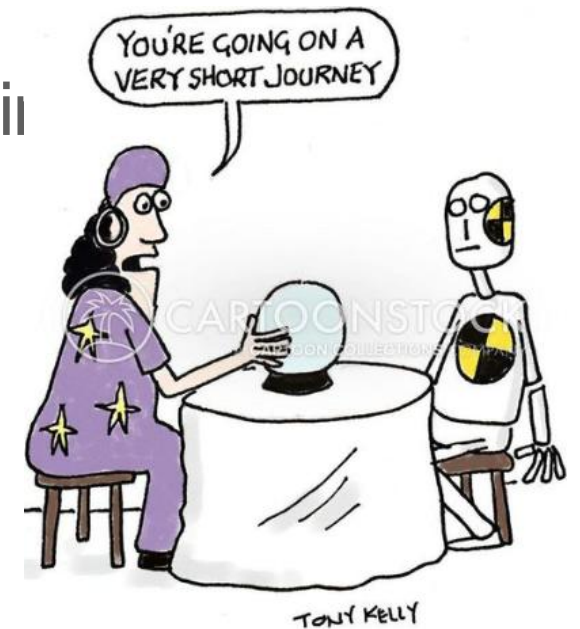


■ Fertility

- Early embryonic death, abortion, or birth of lambs with congenital defects
- possible significant losses in the subsequent season

■ Production losses

- Clinical signs in sheep were severe in NL in 2023 resulting in significant morbidity
- Stock rams
- Breeding animals





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Other exotic diseases



■ Foot and Mouth Disease (FMD)

Foot & Mouth Disease



- **Abortion**
- **Lameness**
- **Vesicles** - on the tongue, dental pad, along coronary band and/or interdigital space (can be difficult to see)
- **Sudden death** - in lambs/kids due to myocarditis
- Sheep is maintenance host
- **Mild clinical disease - “silent shedding”**
- Transplacental infection of foetuses – abortion & uterine reservoir of virus



2 day old lesions, 4 days post-infection

Small ruminants - mouth / feet



Older lesions on the dental pad of a goat.



Freshly ruptured lesions on the dental pad of a goat.



Freshly ruptured vesicles on the tongue of a goat.



Ruptured vesicle in the interdigital space of a goat.



In small ruminants, unlike cattle, lesions are commonly found on the coronary band.

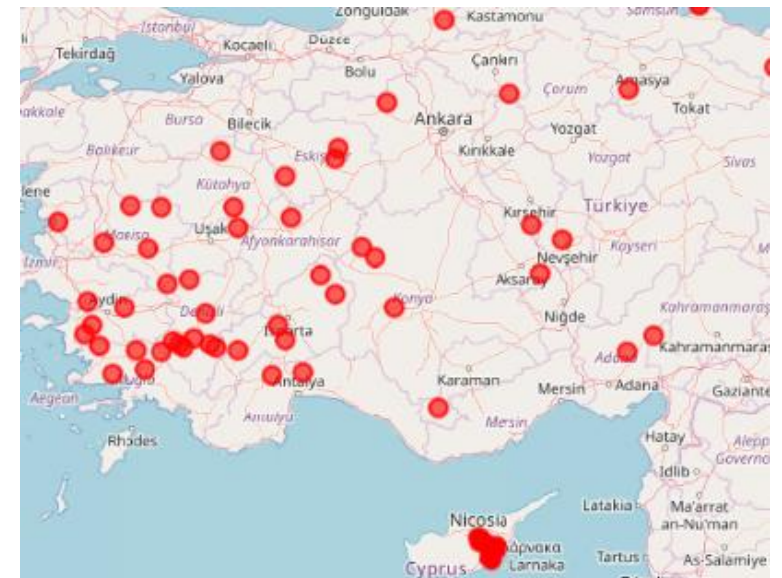
FMD SITUATION EUROPE 2026

Cyprus and Greece



- **Cyprus**
- End of 2025 - FMD suspects in cattle in North Cyprus, area not under the control of the Government of the Republic of Cyprus (CY) – EUVET Mission confirms disease SAT1
- **116** outbreaks to date – including 3 in swine (viral amplifiers)

- **Greece**
- 15th March in island of Lesbos – **83 cases** now reported (18/05/26)
- Sat1/topotype III
- Cattle, sheep and goats
- Investigations to determine origin.





- Peste des Petites Ruminants (PPR)

What is Peste des Petits Ruminants?



- Highly contagious viral disease affecting sheep, goats and some wild ruminants.
- Also known as sheep and goat plague.
- Significant economic impact in the sheep and goat industry.
- *It does not infect humans*
- FAO and WOAHP goal to eradicate this disease globally

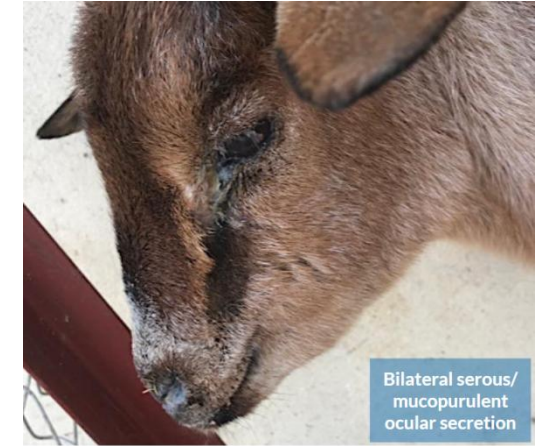
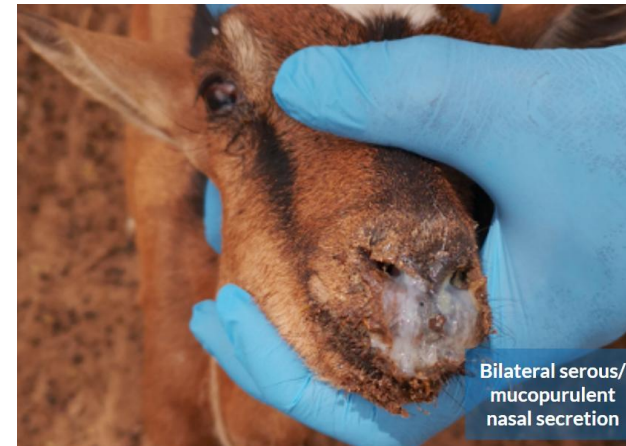


**SUSTAINABLE
DEVELOPMENT GOALS**

Clinical signs

- High **mortality** up to 70% in a naïve flock
- **Multi-systemic**: High fever, diarrhoea, pneumonia, ocular and nasal muco-purulent discharge
- **Foul-smelling** necrotic erosions and ulcers of the mouth and muzzle
- **Abortions**
- **Immunodepression** – more susceptible to other diseases.

Photo credit FAO

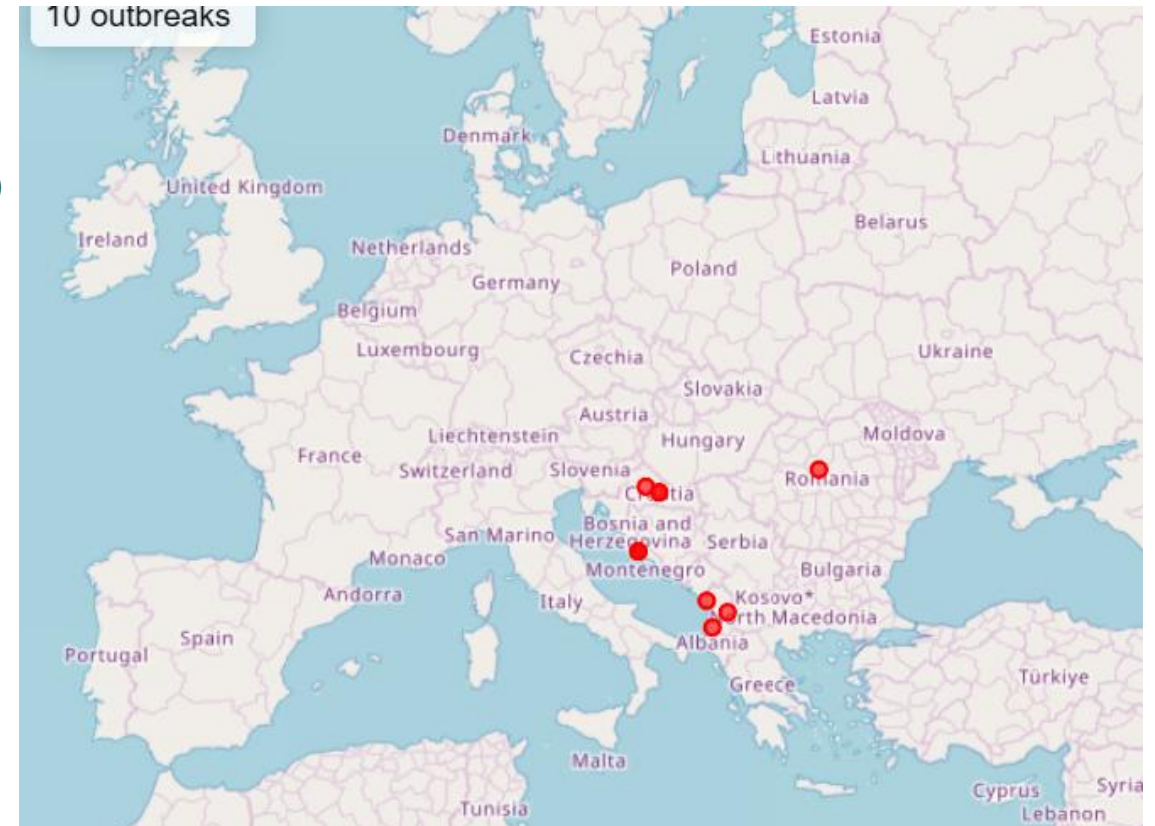


PPR SITUATION EUROPE 2026



- **Never reported in Ireland**

- **Croatia 2026 – 3 cases**
- After the 6 cases disclosed in December 2025 – 3 new cases (2 epi-linked) reported in June in a new region (Northeast Darumar and Cazna)
- **Romania 2026 – 1 case**
- Also a new case reported in June – Mures region
- (Previous case March 2025)
- Ongoing investigations to determine origin
- Neighbouring **Albania** also affected





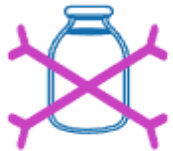
■ Sheep Pox and Goat Pox (SPGP)

What is Sheep Pox and Goat Pox?



- Highly contagious viral disease affecting sheep, goats and some wild ruminants.
- 2 different viruses!
 - *Capripoxvirus sheeppox* & *Capripoxvirus goatpox*
 - Some strains can affect both species if infection occurs in a mixed herd.
- Spreads rapidly and can have a significant economic impact in the sheep and goat industry.
- *It does not infect humans*

Sheep Pox



- Fever
- Conjunctivitis
- Skin lesions
- Dyspnea, nasal or ocular discharge
- Secondary bacterial infections

Mortality up to 50% in fully susceptible flock

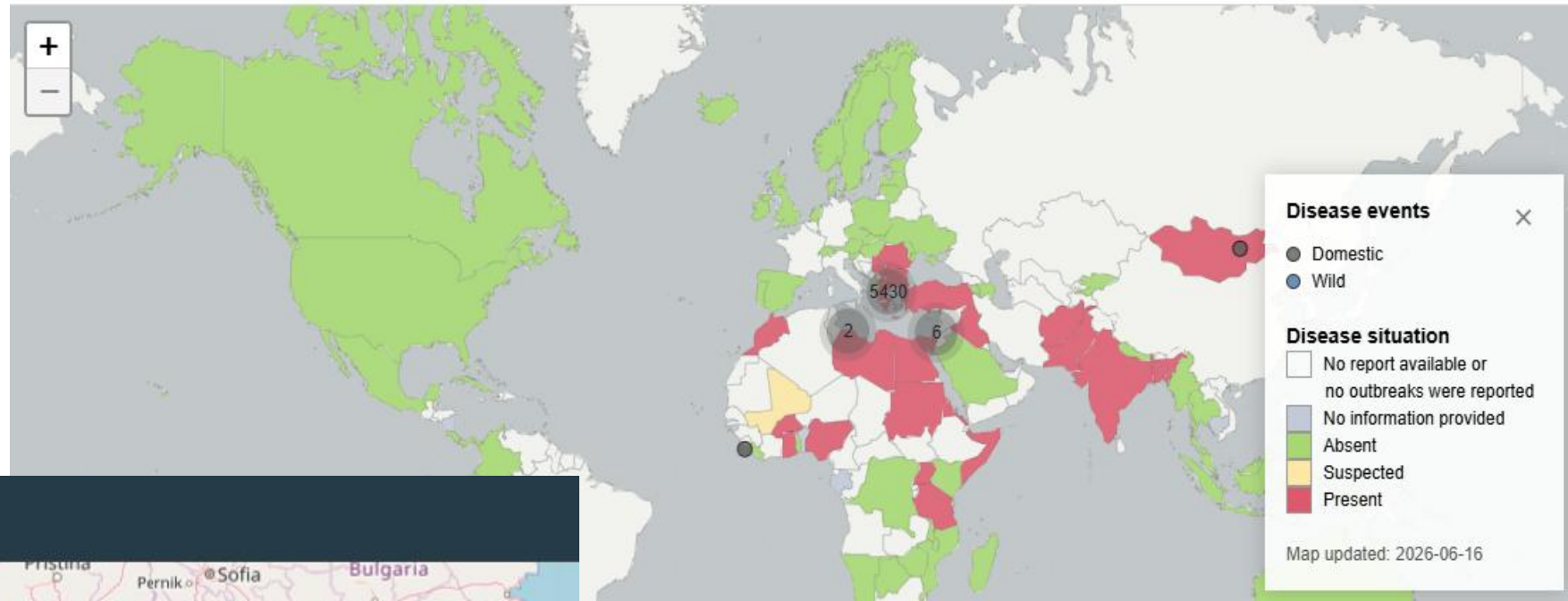
Mortality up to 100% in young animals



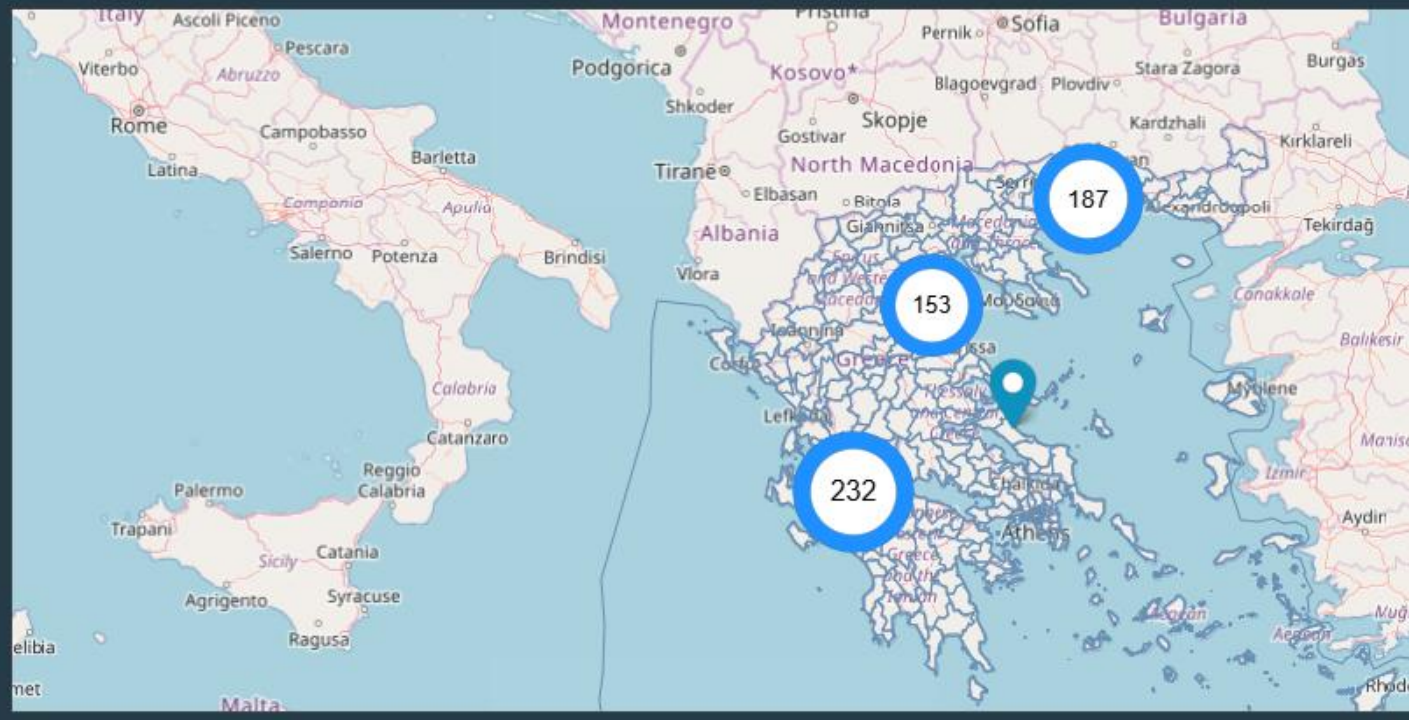
© EuFMD

Sheep pox and goat pox

EU update



Continuing outbreaks **573**



- Outbreaks in Greece, Romania, Turkey



- Germinal Product
(Semen/Ova/Embryos)
- Risks

Risks



- Many exotic diseases are transmitted in GPs
- EU Certification rules ensure:
 - Healthy animal (tested)
 - No contact with diseased animals
 - Establishment freedom
 - Country freedom



Go raibh maith agaibh

**Questions to:
NDCCBTV@agriculture.gov.ie**