



Bluetongue Disease

Overview

Measures

Movements

Direção Geral de Alimentação e Veterinária
30th june 2025





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NADIS

BLUETONGUE

General overview

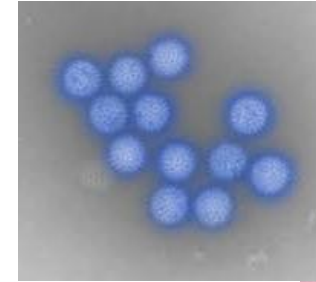
Disease caused by a virus from the *Reoviridae* family.
Over 24 different serotypes with no cross-immunity, meaning a vaccine for one serotype is not effective for the others.

Susceptible animals:

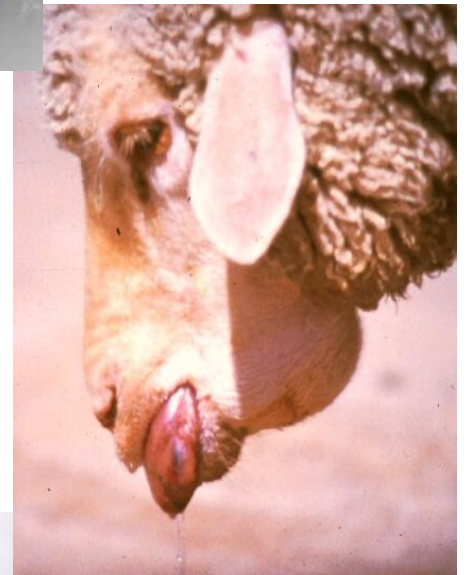
Sheep and goats, Cattle, Wild ruminants

VECTOR – *Culicoides* sp → Distributed across the Iberian Peninsula and also in other countries of the EU

- Optimal temp: 27–30°C
- Activity: higher at sunrise/sunset
- Lifespan: <10 days (up to 90)
- Overwinter as larvae
- Spread by wind (up to 100km)
- Breed near animals, organic matter, mud



The Pirbright Institute



BLUETONGUE – Clinical signs

OVINE

Incubation period: 2 to 7 days

Symptoms:

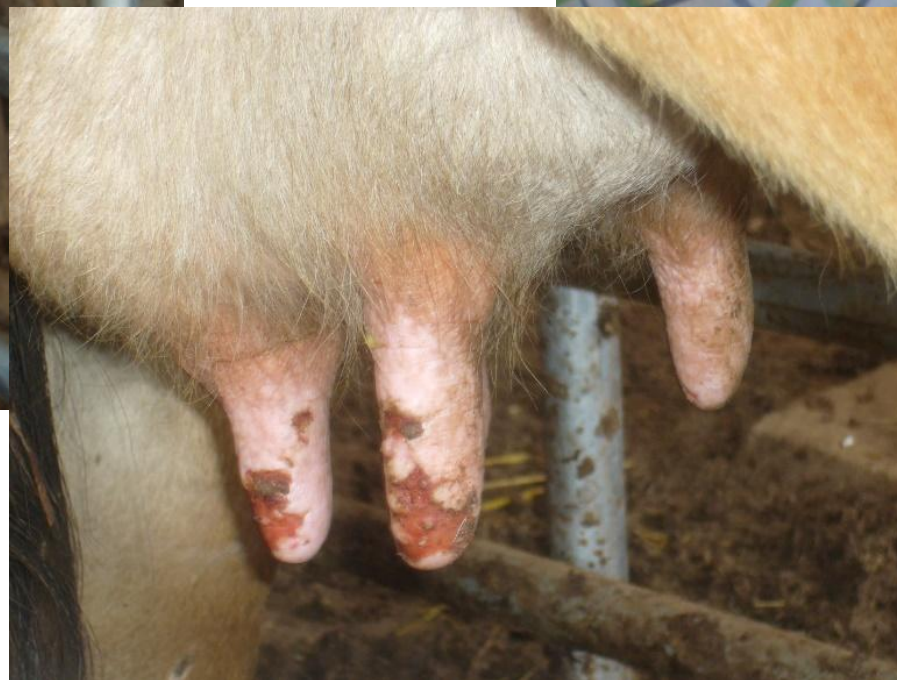
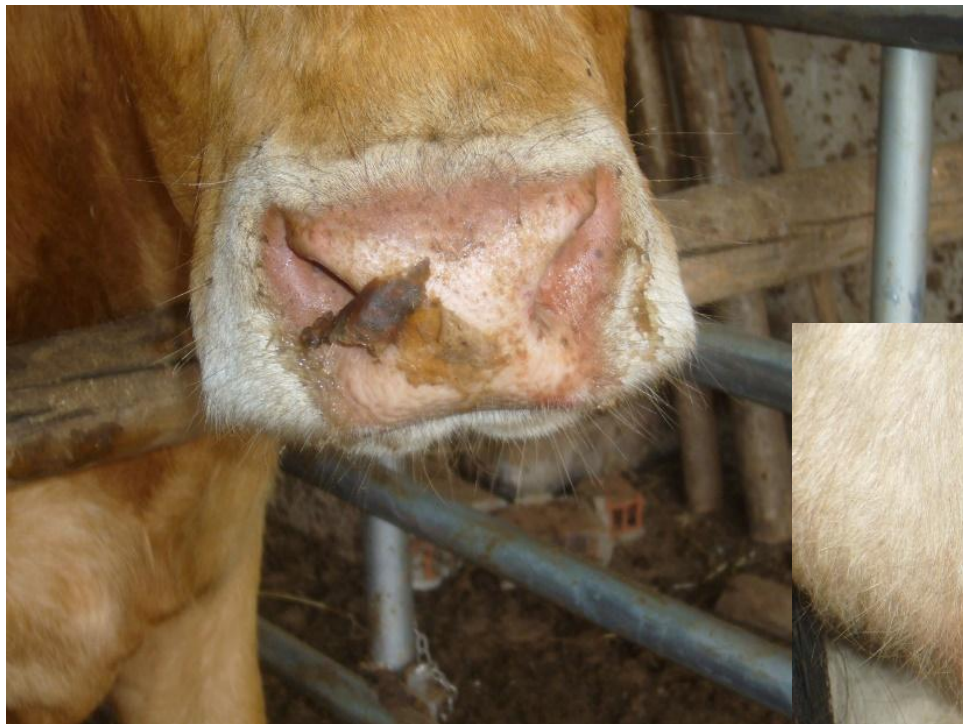
- Fever, depression
- Mouth ulcers
- Swollen, bluish tongue
- Nasal discharge
- Swelling of lips/face
- Lameness
- Pneumonia
- Abortion

- > Can affect over 50% of a herd
- > Mortality rate: 10–15%



BLUETONGUE

BOVINE





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BLUETONGUE– Diagnosis

Investigation of clinical suspicions →
Laboratory confirmation is essential.

Samples:

- Whole blood
- Serum



Analyzed by INIAV (PCR)



BLUETONGUE

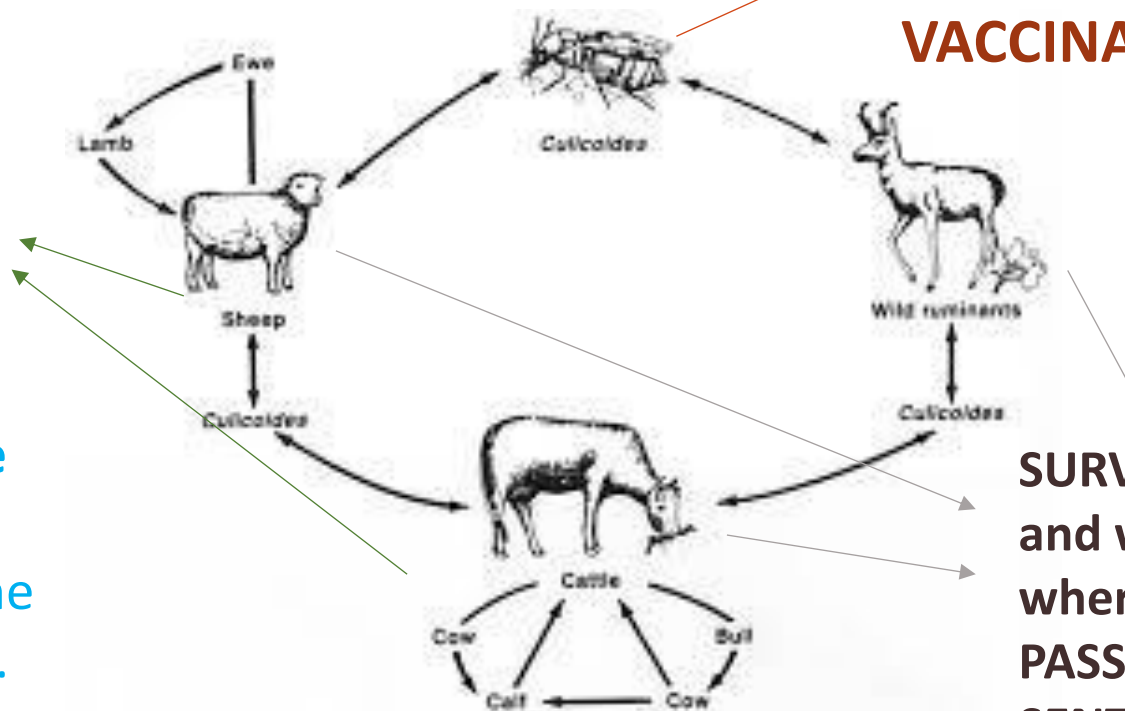
There is no specific treatment against Bluetongue → strengthen PREVENTION.
Sick animals should be treated.

Increase the immune defenses of the main domestic hosts -
VACCINATION

To reduce the spread of the virus, animals should not be moved in the 60 days following infection (when the virus circulates in the blood).

Clean and disinfection

Increase the immune defenses of the main domestic hosts -
VACCINATION

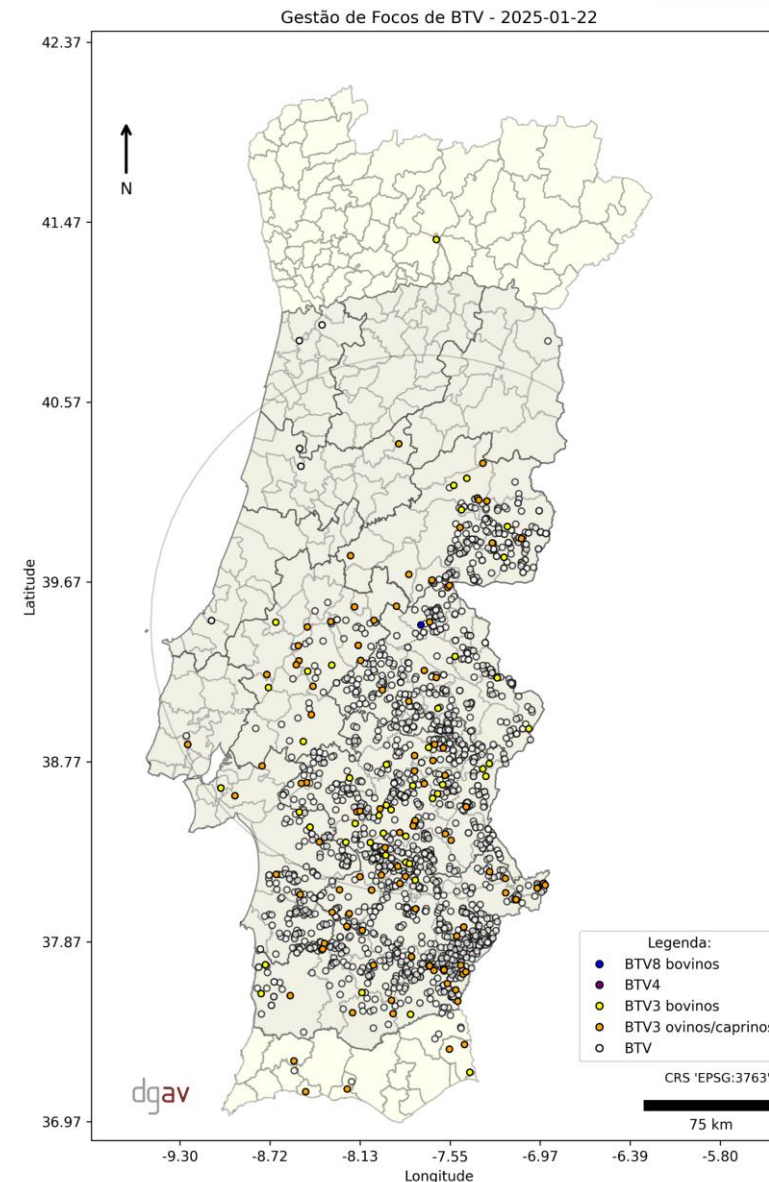


SURVEILLANCE in domestic and wild ruminants to know where the virus circulates -
PASSIVE SURVEILLANCE/ BTV SENTINELS /LARGE GAME SURVEILLANCE PLAN

BLUETONGUE – Portugal

Current Serotypes in Portugal

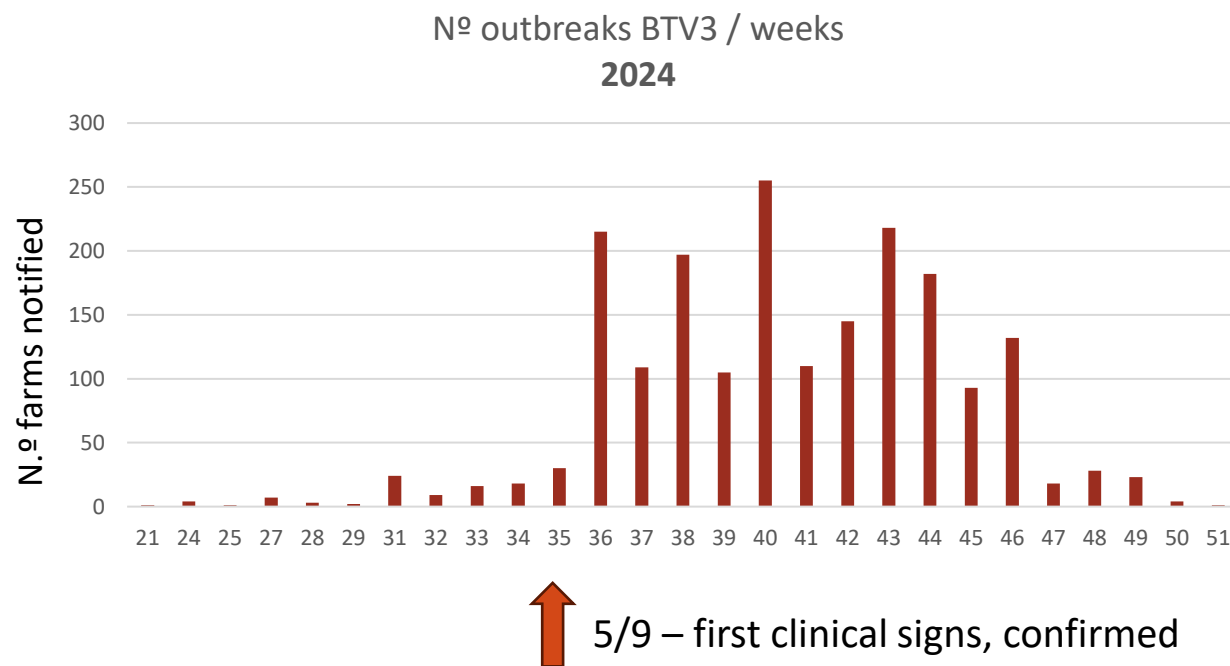
- **BTV4**: Detected in 2004, 2005, again in 2013, 2023 (26 outbreaks), and 2024 (5 outbreaks)
- **BTV3**: First notified Sept 13, 2024 – southern districts
- **BTV8**: Notified Nov 28, 2024 (1 outbreak) – Portalegre
- **BTV1**: Last seen in 2021



BLUETONGUE – Portugal, serotype 3

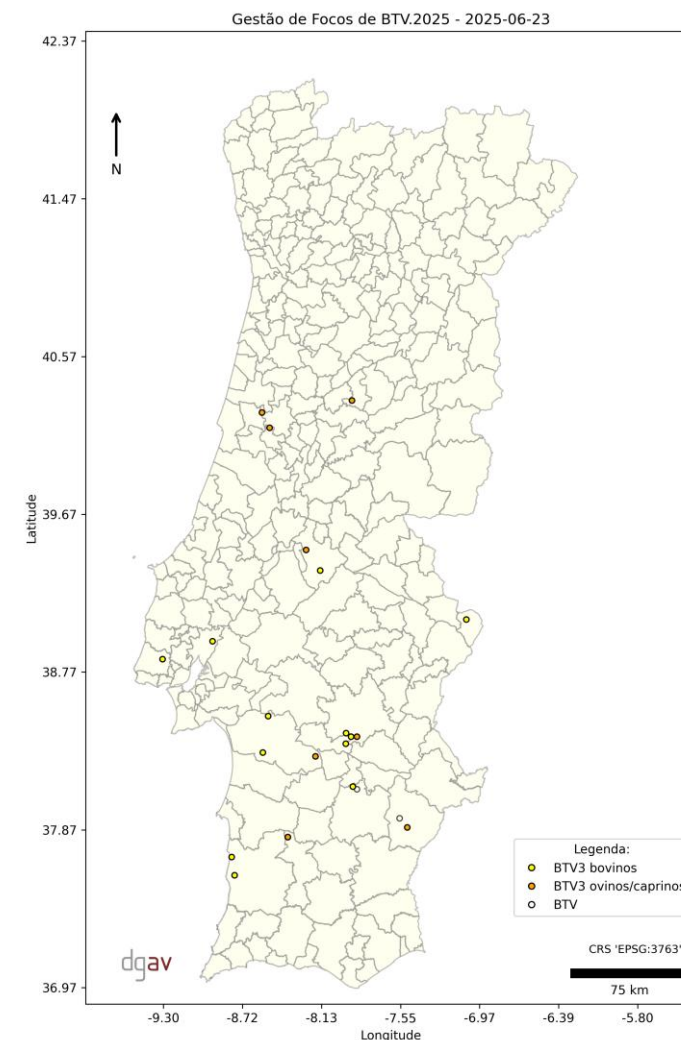
2025

BTV3 Outbreak – Key Stats



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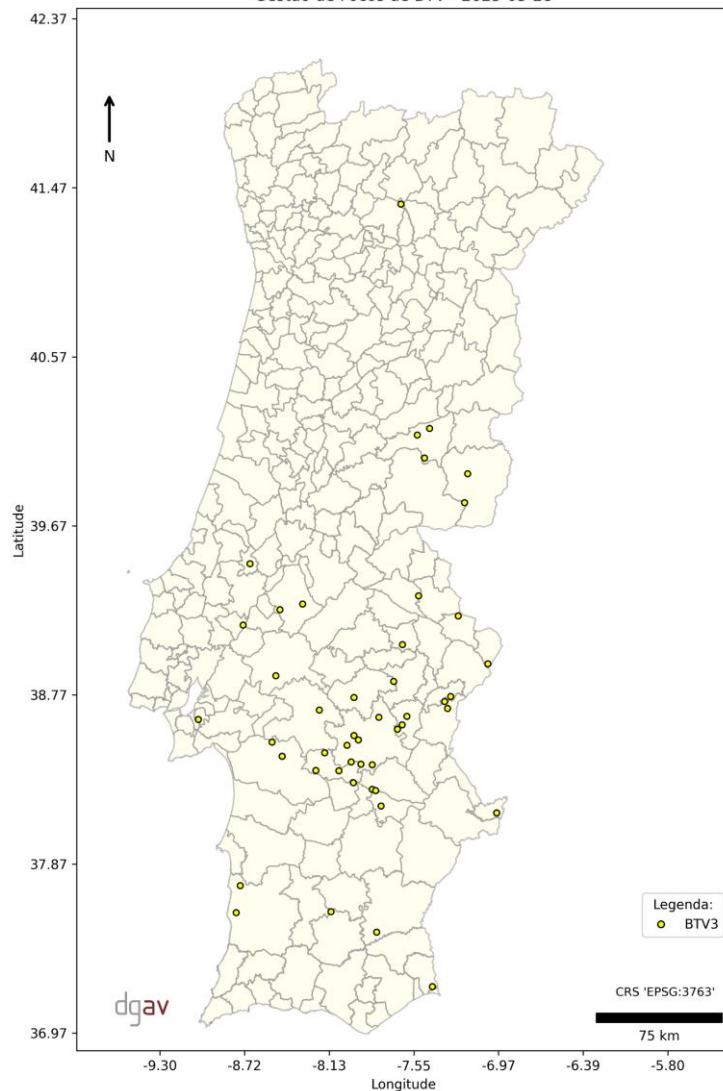
Over 2,090 reported outbreaks
14% herd prevalence
Average morbidity: 29%
Average mortality: 9%



BLUETONGUE – Bovine

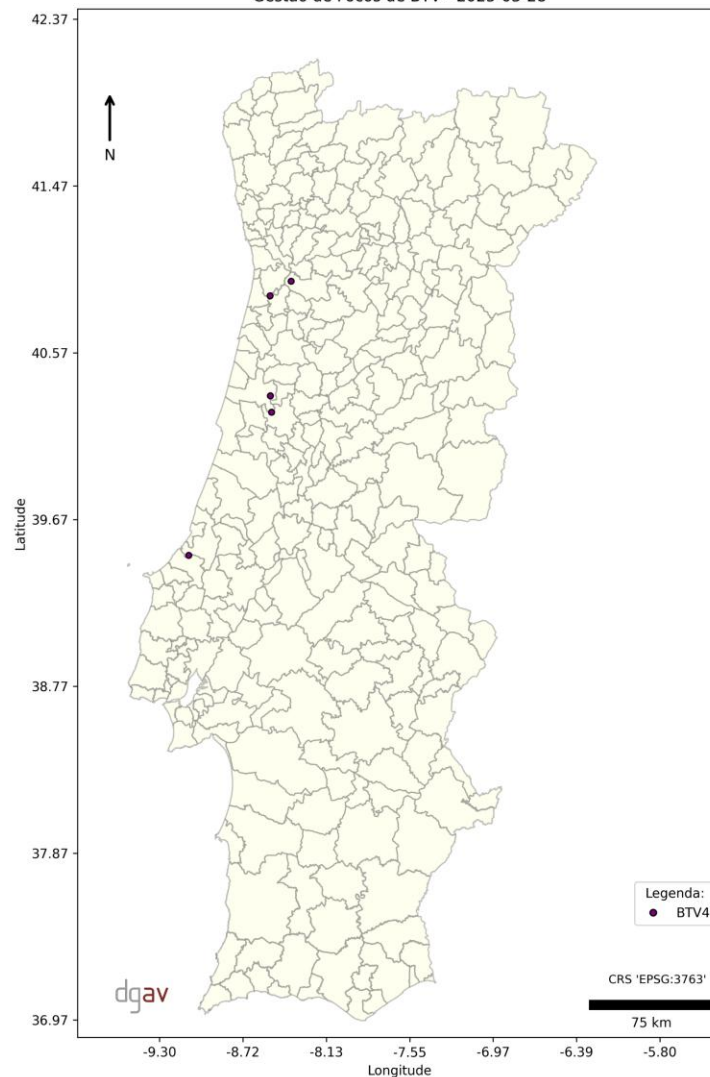
Serotype 3

Gestão de Focos de BTv - 2025-03-28



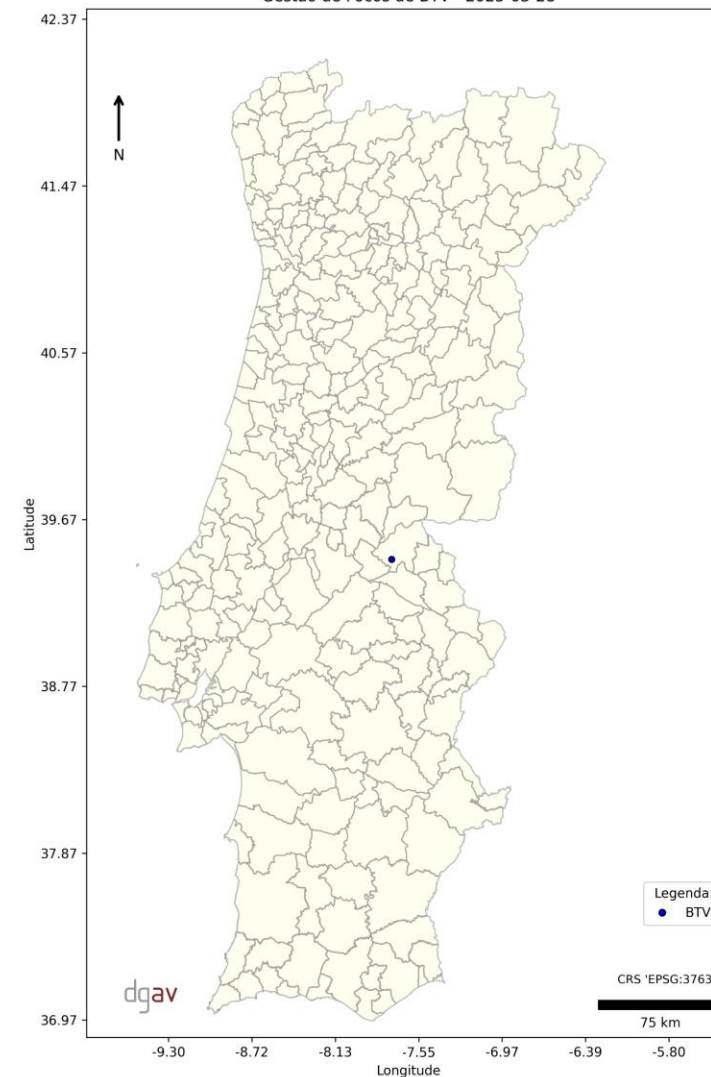
Serotype 4

Gestão de Focos de BTv - 2025-03-28



Serotype 8

Gestão de Focos de BTv - 2025-03-28

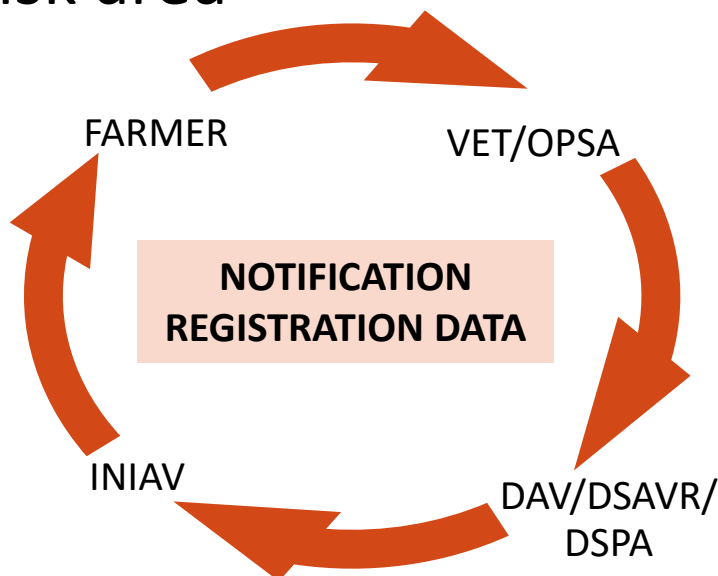


BLUETONGUE – Surveillance

- **Active Surveillance:** Sentinels

Vaccinated animals tested by PCR (random sampling)

- **Passive Surveillance:** Clinical suspicions tested/first occurrence in a council/all in a risk area



BLUETONGUE– Entomological Surveillance

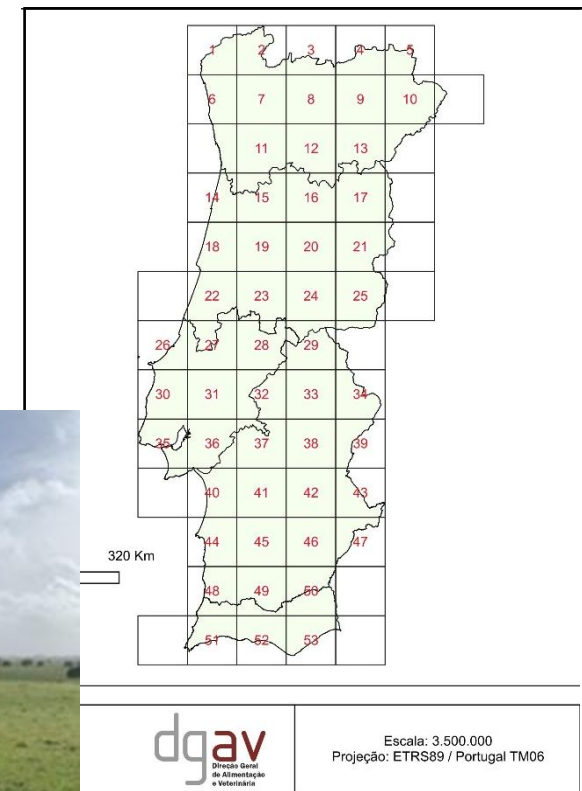
Detection of vectors

Geographical distribution, quantity and maintenance all over the year

Colaboration with OPSA (Organization of farm producers) and private vets

Laboratory analytics - INIAV

- ➔ **Sampling:** Weekly (since December -) or monthly
- Vector-free season defined by two consecutive negative samples
- Restricted season starts with the reappearance of the vectors



BLUETONGUE– Vaccination Strategy

VACCINATION **BTV1-4** – MANDATORY (2023 e 2024)

All the country ovines (1 dosis) and bovines (2 dosis)

Mandatory registration in database PISA.Net

VACCINATION **BTV3** – VOLUNTARY (since 30/9- non comercial vaccine)

All the country Sheeps (1 dosis) and Bovines (2 dosis)

Mandatory registration in database PISA.Net

2025 – VOLUNTARY VACCINATION

- BTV1-4 – ovine breeders / Mainland / Vaccine acquired by DGAV
- BTV3 – ovine breeders / Mainland / Vaccine subsidized
- BTV8 – ovine breeders and bovine / Nisa / Vaccine subsidized



BLUETONGUE– Animal Movement Rules

All regions same status for BTV3, BTV4
North unaffected by BTV8



No Restrictions

PORTUGAL

Transport requirements:

- No clinical signs
- Disinfected animals and vehicles

EU export:

- Vector-free season or quarantine
- Vaccination or vaccinated mother
- PCR test
- Disinsection

Third countries:

- Specific conditions accorded with the country

PT → SP – No conditions

SP → PT – Vaccinated for S1

Derogations movements to Portugal:

https://www.dgav.pt/wp-content/uploads/2025/06/PT_Cond_Mov_BT.pdf



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CONCLUSIONS



CONCLUSIONS — Vaccination & Monitoring

ANIMAL VACCINATION

Reduces susceptibility & pathogen circulation

CONSTANT ANIMAL OBSERVATION

Report suspicions

Preventive containment



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Thank you

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